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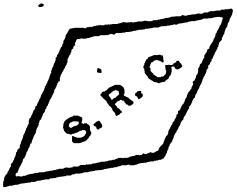
S.R.C.

West London Medical Journal

PUBLISHED QUARTERLY UNDER THE AUSPICES

OF

The West London Medico-Chirurgical Society

EDITED BY

LEONARD DOBSON, M.D.Lond.

Editorial Secretary:—J. G. PARDOE, F.R.C.S.

VOL. XI.

(Nos.—January, April, July, October, 1906)

London

JOHN BALE, SONS & DANIELSSON, Limited

OXFORD HOUSE

83-91, GREAT TITCHFIELD STREET, OXFORD STREET, W.

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West London Medical Journal.

Published Quarterly under the auspices of the West London Medico-Chirurgical Society.

Original Communications.

JAMAICA AS A HEALTH RESORT.

By Dr. S. A. Bontor.

Not so very long ago the West Indies were one of Britain's brightest and wealthiest possessions. When England was most in need of gold she obtained it from the West Indies; when our Empire was in the making the West Indies played a large part in the formation of Britain's greatness; the nursery, if not the birthplace, of our Navy was among the Islands of those Western Seas, for there Drake, Hawkins, Frobisher, and others, learnt their seamanship; there Rodney averted a blow which had been hurled at the very foundation of Britain's greatness, while later still Nelson learnt those tactics in naval warfare which enabled him to gain the victories we have so lately been celebrating. And yet to-day what does the average man know of the West Indies? He is apt to look upon them as a group of poverty-stricken and unhealthy islands, barren of riches, teeming with deadly endemic diseases, sweltering in some tropical latitude, and periodically devastated by earthquakes, hurricanes, and volcanic eruptions. He looks with pity upon those unfortunates who are obliged to go there for business, and never for one moment considers the possibility of going there either for health or for pleasure.

And yet the advantages of the West Indian Islands are enormous; they are dotted in a chain for about 800 miles in

a beautiful blue sea, and have a grandeur of their own not to be found in the tropical continents. To-night we have only time to consider briefly the chief of them, Jamaica, one of the most beautiful islands in the world, with a climate which, although tropical, is so varied in atmosphere and temperature that all tastes and requirements can be satisfied. The temperature is never low, except high up in the hills it is never below 60°; nor is it long *very* high, although it is a land of perpetual summer and in the Tropics, the temperature rarely goes up to 90°; in fact, there is very great uniformity, and the climatic characteristics of each particular district or altitude are wonderfully constant. Thus the tables of the meteorological reports give the following figures:—

	Mean annual temperature	Mean range
Kingston, 60 ft. ...	80	16·2
Hope Garden, 700 ft.	77·3	20·9
Cinchona, 4,900 ft.	62·9	12·2

But almost every day there is a constant breeze blowing in from the sea, tempering in the most delightful way the tropical heat of the sun, while at night a gentler wind blows down from the hills, bringing the freshness of the uplands with it. All day one can be out of doors, in fact, one's life is practically passed in the open air, for even in the houses solid walls are but little in evidence, and their place is largely taken by jalousies—one *shelters* in the house, but *dwells* out of doors.

Although one talks of "winter" and "summer," there is no marked climatic change of the seasons in Jamaica as there is here, the winter temperature being very little different to the summer, but there are two rainy seasons, May, with an average rainfall of 8·5 in., and October, with an average rainfall of 8 in., therefore the best time to visit Jamaica is between November and April, but of course towards the end of this period the absence of rain is likely to impair the luxuriance and beauty of the tropical vegetation and foliage, while between May and October the temperature is more oppressive.

And with this beautiful and uniform climate, Jamaica has equally striking variety in her physical features. Although the Island is only 144 miles long, and 49 miles at its extreme

width, there are 2,217 square miles above an altitude of 1,000 ft., 1,452 square miles between 1,000 and 2,000 ft., 400 square miles between 2,000 and 3,000 ft., 74 square miles between 3,000 and 4,000 ft., 39 square miles between 4,000 and 5,000 ft., and 24 square miles over 5,000 ft. high, and in these various altitudes the visitor can find almost any climate and temperature to suit him, that is to say, he who seeks warmth and sunshine can; for those who seek the keen and bracing air of the North, Jamaica is not the place.

One of the chief objections people have to visiting Jamaica appears to be the dread of yellow fever, but this is a mistake, for yellow fever has practically been stamped out. Some malarial fevers there are, but these are not of a severe or persistent type, and on the best authority I may say there are no endemic diseases to which visitors are liable, if ordinary precautions are taken, and the total death-rate of the whole population of the Island averaged only 21·4 per 1,000 for the last ten years, one of the chief causes of death being pulmonary consumption, which is very prevalent among the black population on account of their insanitary dwellings.

It will thus be seen that Jamaica offers many attractions as a health resort, and visitors will find there an opportunity to enjoy magnificent scenery, a glorious climate, and many new sensations, with as little—or possibly less—risk, provided due precautions be taken, as they would run in Egypt, the Riviera, and other better known resorts.

The chief occupation of the visitor must be the enjoyment of the scenery and life. Sport there is little or none; the usual games, cricket, golf, lawn tennis are played, and played well, and there is some fishing; while in Kingston Harbour yachting of an ideal kind can be indulged in, but the novelty of the surroundings and the new sensations produced by them are the greatest attractions.

There are several mineral springs, most of them possessing valuable qualities for the treatment of various complaints. Two of these are particularly famed: the hot sulphur, at Bath, 126°, suitable for gout, rheumatism, and cutaneous diseases; and the warm salt, at Milk River, this is one of the most remarkable in the world: it is warm, saline, purgative, with a temperature of 92°; the buildings are extensive and have been recently improved. Several other springs are to be

noted, such as Spa Spring, chalybeate, neglected and in decay; Maffot, on White River, sulphuric, purgative, good for cutaneous diseases; Windsor, the spring had a remarkable reputation for the cure of ulcers, people from all parts of the Island visited it, and the water was carried away to great distances.

Mention must also be made of the arrangements for visitors staying in the Island; there are several excellent hotels, notably the Titchfield at Port Antonio—the centre of the American fruit trade—and the Myrtle Bank and Constant Spring Hotels at Kingston, under the careful management of the Elder, Dempster and Co., where everything is done to welcome the stranger and make him feel at home.

NOTES ON FRENCH HEALTH RESORTS.

By Dr. W. S. Colman.

(*An abstract.*)

France is resorted to as a holiday resort for the sheltered sunny climate of its south-eastern coast in winter, and also for more direct medical treatment at one or other of the mineral spas. Owing to limitations of time only the last can be considered. Mineral spas are particularly abundant in France, which, contrary to a prevalent notion, is a mountainous country, more than one-sixth of its surface being over one thousand feet above sea level. There are over 250 places where springs have been exploited, but the chief spas are found on four of the mountainous groups, viz.:—(1) Auvergne (Royat, Vichy, Châtel Guyon, Monte Dore, and La Bourboule); (2) Vosges (Contrexeville, Plombières, and Vittel); (3) Savoy (Aix-les-Bains); (4) Pyrenees (Luchon, Cauterets, Bagnères, de Bigorre, &c.).

A visit to all of these involves a long and fatiguing railway journey at the hottest time of the year. The resorts in the Vosges can be reached in about eighteen hours from London, those in Auvergne in about twenty, while the journey to Luchon takes over twenty-four hours. In the majority of cases patients should be enjoined to rest at least a day in Paris.

The treatment consists in an elaborate application of the natural waters either internally or externally, or both, with such important adjuncts as massage, regulation of diet and exercise, and the beneficial effects of beautiful scenery and a mountain climate.

There are many features which all these resorts have in common.

(1) They are in lovely surroundings at a considerable altitude. (Illustrative lantern slides were shown).

(2) Everything is done to make the treatment impressive and attractive, so that the patient readily submits not only to the ingestion of enormous quantities of more or less unpalatable drinks, but also to regulation of his whole life for a time in a way which it would be hopeless for his doctor to impose on him at home.

(3) Nearly all the small towns or villages are made as attractive as possible both for the patients and for healthy members of their families who accompany them. This is due mainly to local patriotism, an organisation being formed called a "Syndicat d'Initiative," which gives all information by post gratis, arranges excursions, and controls the tariff of carriages, hotels and restaurants, so that the traveller or invalid may not be unduly fleeced.

(4) There is very strong favourable influence of "suggestion." The buildings are of palatial appearance, that of Vichy covering a space of over four acres, and is almost as imposing as the Natural History Museum. The elaborate mechanical contrivances for utilising the waters for baths, internal and external douching, are also not without their effect.

(5) Above all, every case is individualised by the doctors, and special local and general measures are prescribed for each patient.

Internal Use of the Waters.

A. By Drinking.—This is generally given by repeated doses on an empty stomach at the spring itself, the tumblers being filled by women in picturesque local costume. Between each dose the patient takes gentle walking exercise in the fresh mountain air, mostly until satisfactory relief of the bowels has been obtained. No doubt the water itself is one of the

most important factors, but the mineral constituents powerfully assist.

Those of Vichy, Mont Dore, Royat and Evian are alkaline and gently aperient; those of Châtel Guyon chalybeate and decidedly aperient from the presence of magnesium salts; those of the Vosges group are diuretic and aperient; while those of the Pyrenees contain alkaline sulphides and a considerable quantity of free sulphuretted hydrogen, like our Harrogate waters.

B. By Sprays.—This is especially employed for bronchitis and emphysema. At Royat, and especially Mont Dore, the local waters are atonised by mechanical contrivances, so as to fill the room with a fog which the patient inhales for a varying time, and so applies lotio alkalina to a considerable portion of his respiratory passages. At Cauterets and other Pyrenees spas the local sulphur water is employed in a similar manner. The sulphuretted hydrogen involuntarily inhaled while taking an ordinary hot sulphur bath is also said to have a beneficial effect on the air passages.

C. By Internal Douches.—These are used not only for gynæcological cases, but also for the stomach and rectum. For example, at Chatel Guyon the patient is taught to pass for himself a double œsophageal tube, one end of which is attached to a tap, so that the mineral water may circulate through the stomach. Similar tubes are used both there and at Plombières for douching the lower bowel in troublesome cases of mucous colitis. At all resorts the mineral waters are employed for giving ordinary enemata for chronic constipation.

External Uses.—This is especially successful with neurasthenics, chronic joint affections, discharging sinuses, and for skin affections, Aix-les-Bains, Luchon, and Cauterets being the most prominent. The action of the waters appears to be aided by their mineral constituents, and also by the sulphuretted hydrogen with which they are bountifully supplied. Further, they are nearly always very agreeable to the skin, owing to an unctuous substance called baregine which they contain, or to gelatinous silicates.

At nearly all the resorts bathing is combined with external douching and massage, often carried out simultaneously, as in the well-known Aix method. The massage is nearly always very efficient.

PRACTICAL POINTS WITH REGARD TO SENDING PATIENTS.

(1) The proper season must be selected. The baths and hotels are usually open from May to October, but owing to the altitude the period from the middle of June to the middle of September is the most suitable. During the first three weeks of August they are usually uncomfortably crowded. The climate is usually much hotter than in England, but owing to the mountainous situation there may be sudden and severe drops of temperature, and warm as well as light clothing must be taken.

(2) Unless the patient and his friends are familiar with French and French ways, one of the resorts frequented by English must be selected, but these are always more expensive than others equally good patronised only by French. There are very few English medical men except at Aix, but at most of those mentioned in this paper there are French doctors who understand and speak English.

(3) The length of journey must be taken into account. Not a few of them are off the track of the best trains, and often on single lines, so that the journey occupies many hours. The heat by day over the plains is usually intense, and for most, a night journey from Paris is to be preferred.

(4) Owing to the crowded state of the hotels at times, patients, if at all ill, should never be allowed to go until they have received in writing an assurance that suitable rooms will be ready for them.

THE VALUE OF STATIC ELECTRICITY IN THE TREATMENT OF PULMONARY TUBERCULOSIS.

By D. J. CHOWRY MUTHU, M.D.
Physician, Mendip Hills Sanatorium, Wells.

THOUGH the value of static electricity in the treatment of disease has been known and recognised for more than a hundred and twenty years, no serious attempt has been made by the medical profession generally to apply it as a curative agent till of late years. Recent wonderful discoveries of electric forces and their various phenomena, such as X-rays, high frequency currents, radiant heat and light, &c., have

brought into the field an army of workers, and many inventions of scientific character for the application of these forces in practical medicine. So rapid has been the advance made by the electric treatment in late years, that I believe that at no distant date it will take the place of most of the drugs used by the physician in his every-day fight with disease. Static electricity, forgotten and left in obscurity for years, has once more come to the front, and considerable progress has been made, especially in France and America, in bringing it into the region of practical therapeutics. It has already been administered with great success in various forms of paralysis, muscular rheumatism, neurasthenia, anæmia, general debility, sleeplessness, pain, and in various neurotic and functional derangements. Indeed, I am not exaggerating when I say that in some of these affections its effect has been nothing short of marvellous; and the list of diseases in which it can be used is extending, and will extend as the physician comes to understand more and more of its physical properties, masters the technical details of its application, and develops the treatment into a fine art.

In my Sanatorium for Pulmonary Tuberculosis I have been administering static electric treatment with great benefit—especially in some cases, the results have been very striking—so much so that I advocate that in every establishment where consumption is being treated, electric treatment should be combined with the open-air cure. In this paper I shall not enter into any technical details of the static machine or the methods of its application, but shall confine myself to bringing before you my personal observations, and to pointing out some of its physiological effects upon the system and the ways in which it benefits the disease.

The *rationale* of electric treatment in tuberculosis and in other affections is simple. It is one of the most powerful of natural forces we have at command in fighting disease. It is as natural a force as fresh air and sunlight, which we utilise in the open-air treatment. When a horse gets ill we turn it out into the field. When a patient is run down, we send him away to the country or the sea-side; and every sea wave that splashes in the air, and every breeze that blows over the hill-top, is charged with electricity, and Nature surrounds the patient with all the electric influences which

operate on his constitution and tend to restore him to health. In electric treatment we follow Nature, and in this artificial age we produce electricity artificially, and harness its agencies to our use in our battle with disease and microbes.

There are three ways by which static electric treatment benefits the patient suffering from pulmonary tuberculosis.

(1) When a consumptive comes under the physician's observation the soil is already impoverished, the general health undermined, the appetite impaired, and the nervous system in a low, irritable condition. Here the static treatment acts like a general tonic, bracing up the nervous system, stimulating the functions of the body, promoting general nutrition and improving the appetite, and in this indirect way helps the patient to regain his health. Nature at the earliest stage of the disease does not require more than temporary help—like a small loan a man requires when he is temporarily embarrassed and which puts him on his feet again.

(2) At a later stage, when tubercle bacilli have invaded the lung tissue and their toxins have permeated the system, and when respiratory and circulatory functions are interfered with, static treatment, besides its tonic and stimulating effect, increases the force of deep respiration, quickens circulation, promotes perspiration and other glandular secretion, and increases the metabolism of the body, so that the excretion of urea is increased and uric acid in the system lessened. When we realise that health depends upon the proper elimination of all the excretions and poisons of the body, we can understand that the electric treatment, by promoting tissue change and helping the organism to get rid of the toxins and other deleterious matter, aids the process of repair of the lung.

(3) To understand the third and most important way in which static treatment acts beneficially in a case of pulmonary tuberculosis, I must ask your forbearance to digress a little so that I may point out how Nature in many cases brings about a cure. One of the most important methods by which Nature cures disease and relieves pain is by promoting hyperæmia. A grain of sand falls upon the eye, which becomes red and congested, tears ooze and bathe the eye, and remove the offending element. The temporary congestion of

the eye is not a morbid process, but Nature's way of driving out the foreign body.

So in pleurisy. All pleuritic affections, as it is coming to be recognised, are of microbic origin—rather, the inflammation of the pleura is the result of the invasion of microbes. When micro-organisms attack the pleura, Nature calls for reinforcement from other parts of the body; the pleural membrane gets congested, leading to the exudation of serum, which attempts to wash away and neutralise the poison, and of leucocytes, which attack the intruder and overcome him.

In pneumonia, which is the result of the invasion of micro-organisms in the lung, the inflammation is not so much a morbid process as Nature's way of meeting the enemy by bringing a larger supply of blood to the seat of the attack.

So when a finger gets poisoned and swells, the redness and swelling are not truly morbid, but Nature's method of bringing help to the affected part to prevent the entrance of pathogenic organisms into the system.

If Nature brings sufficient reinforcement to the battle-field, well and good. The pleurisy gets well, resolution takes place in pneumonia, and the swelling of the finger subsides. It is only when Nature fails to meet the situation that the process, to my mind, becomes morbid. Sometimes, in her zeal, she may bring in too much blood to the part, as in some cases of pneumonia, nephritis, &c., or, in her weakness, the supply may be poor in quantity and quality, as in some chronic ulcers of the leg, &c. Here the physician who watches the operations of Nature and works with her comes in with his help, and in one case he draws off the extra blood by counter-irritation, &c., and in the other mechanically regulates the supply, as by Esmarch's bandage, &c.

In pulmonary tuberculosis Nature effects a cure in the same way, viz., by causing a temporary hyperæmia in the lung substance. When tubercle bacilli have pierced through the first lines of defence, and encamped over the upper portion of the lung, an alarm is given, reinforcement is sent to surround the tubercle, and many and many a case of early attack of consumption gets well by this prompt action of Nature long before the patient has any knowledge of the existence of disease in him, or the physician can find out any signs of its presence. At a little later stage, but still very early in

the invasion of the lung, how many cases get well which present a history of early hæmoptysis, which is simply an external sign of hyperæmia of the lung at the affected area. At a stage later still, when patients generally come before the notice of the physician, the majority of cases that get well are those which respond to the attack of the enemy by inflammatory reaction — which means that zones of congestion appear and surround every tubercle nodule, a battle royal takes place, when leucocytes, migratory cells, phagocytes, all crowd round the enemy and destroy him in great number, while the blood serum, bathing the injured lung, and taking up the toxins and neutralising their deadly action, prevents any further spread of mischief. And remedies that have from time to time been advocated in the cure of pulmonary tuberculosis, such as Koch's tuberculin, Professor Landerer's injection of cinnamic acid, intravenous injection of formalin—all aim at success by creating an inflammatory zone round the affected area.

If this be Nature's way of bringing about healing in the lung, we must follow her if we would attain the same object, and help her in those cases where, for some reason or other, she fails to bring about a healthy inflammatory reaction in the lung tissue.

Fresh air, by invigorating and stimulating the functions of the body, and by increasing the power of respiration, tends to bring more blood and nourishment to the diseased lung, and hence the beneficial effect of the open-air treatment in consumption. And in my experience static electric treatment does the same, only in a more pronounced way. The general electrification, together with static spark and spray over the chest, &c., increases the activity of the lungs, stimulates the vasomotor system, quickens circulation and respiration and helps to bring about a healthy hyperæmia in the lung substance, and the absorption of inflammatory products, especially in those chronic cases which suffer from low vitality and impaired metabolism. In proof of my contention, I would briefly submit the following clinical observations, which are common in our sanatorium experience in phthisical patients.

(*a*) Patients suffering from cold feet, persistent subnormal temperature and sleeplessness, after a course of electric treatment find their general health improved, their temperature normal and sleep restored.

(*b*) After static treatment patients show signs of reaction, the face gets flushed, the temperature goes up to one, two or even three degrees F. above normal, which is followed by increased cough and expectoration and crepitant râles, which subside after a few days.

(*c*) A German doctor from Bonn sends me the following case, which I myself saw and examined. A young man with tuberculosis, right ankle considerably swollen and riddled with abscesses and fistulæ came under observation in 1903. He also showed signs of tuberculosis of the bladder. The ankle was so bad that an operation was almost decided upon; but under static electric treatment, both local and general, his general health improved, the abscesses healed up, the swelling subsided, and after six months' treatment the ankle got well and the patient was able to walk. In another article I hope to go more fully into this case.

(*d*) Patients with chronic cavities in the lungs, with low temperature and feeble vitality; after the electric treatment the temperature not only becomes normal, but goes up to 100° F., or even more, followed by cough and expectoration, moist râles make their appearance over the area of the cavity, which heals up eventually. Some cavity cases respond more quickly than others.

(*e*) In many cases of pleuritic affection with pain, static treatment acts like a charm, the pain disappearing very quickly and fine crepitations subsiding after two or three applications.

So this is the one point I wish to emphasise in this paper, viz., that in pulmonary tuberculosis static electric treatment assists the process of Nature by (1) improving the general condition; (2) by helping to remove the waste products from the system; and (3) by creating a temporary hyperæmia round the tubercle area. Whether the static treatment or electric treatment in general has any specific action in this disease remains to be proved. I am at present engaged in carrying on some experiments to ascertain whether it has any direct action in destroying the vitality of micro-organisms in the diseased lung; but so far as our present knowledge goes, it helps to restore the vital processes of nutrition and absorption, to remove waste matter and to regulate the blood supply. And this assistance is indeed very great when we consider

that the organism is making a tremendous fight with the microbe enemy for its very life, and that any help often turns the doubtful issue into a decided victory. Static electric treatment is a distinct aid in the promotion of cure in pulmonary tuberculosis—this is my experience.

I am sorry much discredit has been brought upon the electric treatment by unscrupulous men whose ignorance is only equalled by their impudence. It is quite true, as a physician said, that electric treatment has suffered immensely from the apathy of our own profession and the ravages of the quacks. We are still in infancy with regard to our knowledge of electric forces and their relation to health and disease. The more their physiological properties are intelligently studied and the method of their application thoroughly understood, the wider will be the field of their usefulness in their service to humanity.

THE OPSONIC POWER OF BLOOD.[1]

By Dr. Beddard.

Gentlemen, — The subject of my lecture to-day is the opsonic power of blood. My lectures necessarily deal with practical medicine, and if this subject were merely of theoretical interest, I should not trouble you with it here. But it seems likely that you will hear a good deal of this subject in the medicine of the immediate future, for, as a matter of fact, certain modern methods of treatment are possible only when guided by observations on the opsonic power of the patient's blood. I can attempt only a very brief outline, just enough, I hope, to enable you to understand something of the work which is being done and its bearing on practical medicine. In this, as in so many other scientific subjects, a special nomenclature has been employed; and it is the peculiar nomenclature and not the subject itself which renders it at first difficult to follow by persons who are not conversant with the special branch of science in question. I shall, therefore, put the matter before you in the most simple way that I can, and would apologise to those who are already con-

[1] A lecture delivered at West London Hospital on October 18, 1905.

versant with the modern terms used in dealing with the question of immunity in general.

It is necessary to remind you briefly of certain well-known facts about immunity. The defence of the organism against an invasion of bacteria is developed along two main lines: (1) The production of anti-toxin to neutralise chemically the bacterial toxin. This question does not concern us further to-day. But it is clear that even a successful neutralisation of the bacterial toxins would not put an end to an infection. In order to do this the bacteria which have already obtained a foothold in the tissues must be killed off and destroyed. And this is brought about by (2) the process of bacteriolysis. The greater the immunity of the animal the more wholly does bacteriolysis take place intracellularly, *i.e.*, within the phagocytic white blood corpuscles, and is, therefore, connected with the phenomenon of phagocytosis. The mere juxtaposition, however, of a phagocyte and a bacterium does not ensure phagocytosis; a third factor is necessary, namely, a substance which shall first combine with the bacteria and make it edible to the phagocyte. Such substances are called opsinins; the name is derived from opsono, I prepare a feast for.

Wright has developed a method of estimating the opsonins in blood or other body fluids. The method consists essentially in mixing together the three factors necessary to produce phagocytosis and of observing the degree of phagocytosis which takes place. For this purpose equal volumes of the patient's freshly drawn blood serum, which will contain the opsonins, of blood corpuscles freed from opsonins, &c., by washing, and of an emulsion of tubercle bacilli, are mixed in a capillary tube and placed in an incubator at body temperature for about twenty minutes. Films of the mixture are made and stained for tubercle bacilli. The number of bacilli contained within fifty phagocytes is counted and the average number of bacilli taken up by each phagocyte is determined; this figure gives the phagocytic index of the patient's blood. It is found that the phagocytic index is independent of the source of the phagocytes. In other words, this figure is a measure of the quantity of opsonin present, and variations in the index will represent differences in the quantity of opsonin present, and not variations in the activity of the phagocytes apart from opsonin. It is necessary to have some standard

with which to compare the phagocytic index of different patients and of the same patient at different times. The standard used is the phagocytic index of a healthy person, for it is found that this value is the same and constant in all healthy people within very small limits. Taking the phagocytic index of healthy blood serum as unity, the ratio of the patient's serum to this will give a figure which may be greatly below or above unity, and which is called the opsonic index of the patient's blood. We thus see that the opsonic index represents the opsonic power, or quantity of opsonin present in a given serum as compared with that in a healthy person. We further see that the method enables us to measure quantitatively one of the factors concerned in immunity against tubercle or any other bacterium, and we may therefore use the opsonic index as a measure of a patient's immunity as compared with that of a healthy person. The only drawback to the method is the length of time it takes, a single determination extends over the best part of three hours.

From what has been said it is clear that opsonins pre-exist in serum before an infection takes place, that they vary in quantity in the body fluids of people with different degrees of immunity and, as we shall see, in different parts of the same patient's body. The next point we must deal with is the important and practical one that the opsonic index of serum, and therefore the patient's immunity, may be altered by appropriate treatment. In this question of treatment, the essential point to grasp is this, that one and the same treatment both reduces and increases the opsonic index, and that the first effect of treatment is to reduce the patient's opsonic index, that is, it reduces his immunity or increases his susceptibility. This fact is well shown in the treatment of tuberculous patients with tuberculin, which may be looked upon as a preparation of the toxins of the tubercle bacillus. Koch introduced the treatment some years ago with the object of increasing the immunity of tuberculous patients artificially by repeated injections of tuberculin. The results obtained did not fulfil expectations; some were undoubtedly good but some were bad, and the treatment fell into disrepute. There can be little doubt, however, that this neglect of the treatment has been a great mistake: the treatment is scientifically sound, and all that is required to make it a success is some indication

of how often the injections are to be repeated, in what doses, and at what intervals. This has now been supplied by Wright. He showed that the first effect of an injection of tuberculin into a tuberculous patient is to reduce the opsonic index. This negative phase of decreased immunity lasts ten or more days, and is then followed by a positive phase of increased immunity, which reaches a level higher than that possessed by the patient before the injection. If now a second injection is given the opsonic index shows again a negative phase followed by a positive phase which reaches a still higher level. By giving repeated injections at appropriate intervals it is possible to increase the opsonic index of a patient's blood to about twice or three times that of a normal person; but beyond that limit it is impossible to go. If, on the other hand, a second injection is given at any point during the negative phase of the first, the opsonic index undergoes a still further fall, and in this way by repeating injections at too frequent intervals it is possible to drive down the opsonic index and make the patient more susceptible to tubercle than if he had been left untreated. There can be little doubt that this is the explanation of the unfavourable results obtained in the early days of tuberculin treatment. For the purpose of treatment Koch's new tuberculin (T.R.) is now generally used.

One or two minor details may be dealt with here. We have seen that an injection of tuberculin into a tuberculous patient causes first a fall and then a rise of the opsonic index. Wright has shown that the dose necessary to produce this result is much smaller than the dose necessary to produce any constitutional disturbance, such as a rise in the body temperature. The sort of dose now being used for treatment is about $\frac{1}{1000}$ m. gm. We have now to ask, supposing this dose is injected into a non-tuberculous patient what happens? So far as observations go at present the person's opsonic index undergoes no fall. This absence of a negative phase in healthy people clearly opens up a diagnostic method of using tuberculin, which has the great advantage over the old method in that it is free from the risks of the older method which we must discuss in a minute. Another and important question is this—when a tuberculous patient has received a series of tuberculin injections how long does his raised opsonic index,

that is, his increased immunity against tubercle, last. At present this is not accurately known. There is no doubt that when the injections cease the opsonic index slowly falls in the course of weeks, but probably it remains up for some considerable time.

In this connection it is necessary to say a word about the old method of using the tuberculin for diagnostic purposes. For this purpose the old tuberculin is generally used, and Koch advised that it should be used in the following way. A first injection of from 0·1 to 1·0 m. gm., according to the age and strength of the individual, is given. If no reaction follows in about twelve hours' time a second injection of double the quantity first given is injected on the third day. If no effect is produced by the small doses an injection of 5 to 10 m. gm. may be given. If, however, the first injection is followed by a very slight reaction, such as rise of half a degree, the same dose should be injected again at the end of three days. This is often followed by a much greater rise in temperature. But if the reaction is still uncertain larger doses at the same intervals may be used. There can be no doubt that such tuberculin injections are a valuable means of diagnosing tuberculosis in non-febrile cases, and that the margin of error is not greater than about 10 per cent.; but it is also clear that a series of large injections given at such short intervals as three days will certainly reduce the opsonic index of the patient's blood, and if he happens to be tuberculous he will be rendered temporarily more susceptible to tubercle. Whether this temporary increase in susceptibility is ever sufficient to light up latent tubercle or to aggravate the active disease is uncertain; but the moral would seem to be that if such injections at short intervals are given they should be as few in number as possible.

The next point I wish to deal with is the fact that patients suffering from tuberculosis may have an opsonic index above as well as below unity. At first sight this seems a surprising fact. For it would seem, *à priori*, likely that anyone possessing more opsonin than a healthy person would be relatively immune and could not be suffering from the disease, and we might have expected that all patients suffering from tuberculosis would have had an index below unity. But teh explanation of this fact is simple and important. A patient

with tubercle in some part of his body will constantly be receiving small doses of tuberculin manufactured in his own tissues. Consequently his index, instead of being constant like that of a healthy person, shows frequent spontaneous negative and positive phases. In passing, it may be pointed out that the want of constancy in a patient's opsonic index is of diagnostic importance. But to return to the patient who is absorbing tuberculin, we should expect that, if his machinery of immunisation is good and he is capable of giving an active response to the stimulus of infection, as shown by his positive phases, his index would be spontaneously raised above unity just as it may be as the result of tuberculin injections. In fact, we have to account, not for the cases of tuberculosis with an index above unity, but for those whose index is below that level. Wright believes that a low index means one of two things—either that the patient has an inherent deficiency of immunising machinery and is therefore a person inherently susceptible to tubercle, or that the machinery has become exhausted. In any given case of a low index it is, of course, a matter of opinion to which of these two causes the low index is due, but it is often possible from the nature and history of the case to form an opinion. For instance, in most surgical cases of tubercle the index is low, such as lupus, tuberculous joints, psoas abscess, &c.; and as in these cases the constitutional symptoms are generally slight, it is probable that the low index is due to the inherent deficiency of immunising machinery. In phthisis the index is very variable. We should expect that a patient suffering from tuberculous disease in such vascular organs as the lungs would absorb tuberculin, and if he had any reactive power in him at all, would in consequence have an index above unity. And this is found to be so in most moderately early cases of phthisis. In other early cases, however, the index is found to be low, and this is probably to be ascribed to an inherent defect of the immunising apparatus, especially as most of these cases give a strong family history of tubercle. On the other hand, most advanced cases of phthisis with pronounced constitutional symptoms have a low index, and this may be safely ascribed in most cases to exhaustion of the immunising machinery.

We have now to consider the important point whether all cases of tuberculosis are suitable for treatment by tuberculin.

And the answer to this is certainly in the negative. Patients suffering from surgical tuberculosis, or from early phthisis, who have a low index, are certainly suitable cases, for by this treatment their immunising machinery will be stirred up to greater activity, their opsonic index will be raised and their immunity increased; and by this means we have every reason to believe that the local tuberculosis lesion will be improved or cured. When the index is already high it is at present doubtful how far attempts to further raise the index by artificial injections of tuberculin are of any benefit. On the other hand, when in advanced phthisis the index is already low from exhaustion of the immunising machinery, it is manifestly impossible for further doses of tuberculin to increase the patient's immunity.

There is another reason why cases of advanced phthisis and certain other similar conditions are not amenable to cure by tuberculin injections, even supposing we could thereby raise the opsonic index of their blood; for in order that the opsonins in the blood may cure the local lesions, it is necessary that they should be able to diffuse from the blood into the tuberculous tissue. Many old tuberculous lesions are, however, separated from the blood by such a thickness of caseous and fibrous material that the opsonins in the blood cannot reach the interior of the tuberculous masses. Thus Wright has found that in a case of psoas abscess, whilst the index of the blood was ·6, the interior of the abscess contained no opsonin whatever. The same would probably be true in cases of advanced phthisis.

I need scarcely point out to you that this method of treating surgical tuberculosis and early cases of phthisis by tuberculin is as yet only in its infancy. An enormous amount of most laborious work will have to be done before we can know which cases are suitable and which are not; how far the method is completely curative in suitable cases and the best method of applying it; but the importance of the subject is obvious to us in England, where tuberculosis is such a scourge. I do not think it is too much to say that the treatment of surgical tuberculosis, such as lupus, tuberculous bladder and joints, &c., is most unsatisfactory. The sanatorium treatment of early phthisis gives good results, but it is very prolonged, and so expensive as to be prohibitive except to the com-

paratively rich. Sanatorium treatment, to my mind, does not touch the question of how we are to deal with phthisis in the general population. Consequently, when a comparatively cheap and simple method of treatment is put forward, it is not only interesting to the medical profession, but economically it is of national importance. One can only hope that, before large sums of public money have been sunk in providing sanatoria for the poor, we shall have gained sufficient knowledge of the tuberculin treatment to be certain of its uses and limitations.

Tuberculosis is not the only condition which is being treated with success by the injection of bacterial substances, guided by observations on the opsonic index. It is obvious that in most acute infective diseases there would not be time for such a line of treatment to be adopted; the patient would be either well or dead before the treatment had had time to produce an effect, but in the more chronic infective diseases it is clearly a suitable line of treatment. For instance, in furunculosis and acne vulgaris it is found possible to vaccinate a patient with dead cultures of his own staphylococcus, and so raise his opsonic index and render him immune against that special micro-organism. In this way the most brilliant and permanent cures are being produced.

By a similar method it is possible that some day we may be able to treat some or all of the chronic infections which at present we are powerless to influence—such conditions as rheumatic endocarditis, gonorrhœal joint affections, acute rheumatoid arthritis, &c. In fact it is, *à priori*, likely that all chronic, as opposed to acute, infections may be treated at no very distant date along these lines.

I feel that the importance of the subject is sufficient excuse for my having brought it before you. I have not attempted to describe all that is known on this subject; that can be learned by reading the numerous papers published by Wright and his pupils. If I have explained the principles which underlie the method sufficiently to enable you to understand the work as it is published by the various workers, I shall have wasted neither my own time nor yours.

Reports of Proceedings.

ORDINARY MEETING.—October 6, 1905.

LEONARD A. BIDWELL, Esq., F.R.C.S., President, in the chair.

The following gentlemen were elected members of the Society: Arthur D. Deane, M.R.C.S., L.R.C.P., 2, The Mall, Brentford, W.; R. W. T. Ewart, M.B., C.M.Edin., 4, Wandsworth Bridge Road, Fulham, S.W.; C. M. D'A. Lempriere, M.R.C.S., L.R.C.P., 118, Castlenau, Barnes, S.W.; Andrew Robertson, M.B., C.M.Glasg., 57, Crouch Hall Road, Crouch End, N.; I. W. Thomson Walker, M.B.Edin., F.R.C.S.Eng., 8, Cavendish Place, W.

The President delivered his address, entitled, "The Progress of Intestinal Surgery," which was published in full in the October number of the Journal.

Dr. W. CALVERT JAMES: I have the honour to propose a vote of thanks to your President for the able, interesting and highly instructive address he has just delivered. Those of you who selected Mr. Bidwell for election to the chair must feel very gratified, for he has speedily proved the wisdom of your choice; and all must feel certain that his year of office will be a year of progress and success.

The normal state of many of us—especially those who are students of the Post-Graduate College attached to this building—is one of indebtedness to our President, and to-night, through his practical address, many more of you will feel that you have joined us in that respect and are now in a similar position of indebtedness to our Dean.

It would ill become me to attempt to discuss such a "paper," and I am thankful to know that on such an occasion it is not usual. A considerable time must be allowed to digest what has been said; I feel that the longer the time taken to criticise, the greater will be the praise given to the address, the greater the instruction received, and pleasure experienced by the critics. May I be allowed to make a practical suggestion? It is that those of you who have not joined the Post-Graduate College should do so—and thus have the double advantage of making your President your Dean also.

Gentlemen, I beg to propose, in no formal manner, but in the heartiest manner possible, a cordial vote of thanks to the President of the West London Medico-Chirurgical Society for his most excellent address.

Dr. CAMPBELL POPE: It gives me great pleasure to second the vote of thanks to our President, partly because, to my sorrow, I belong to that category of non post-graduates to which the mover has alluded, and it gives me the opportunity of expressing, on behalf of my fellow non post-graduates, our appreciation of the address. And on another ground, although I have not had the opportunity of studying in the College, it has been a great pleasure to me during many past years to have gained much information and help from consultations with our President in private practice. It is therefore on both these grounds that I have peculiar pleasure in seconding the vote of thanks.

ORDINARY MEETING.—Clinical Evening, Friday, November 3, 1905.

LEONARD A. BIDWELL, Esq., F.R.C.S., President, in the Chair.

The following gentlemen were elected members of the Society: John Alfred Barnes, M.R.C.S., L.R.C.P.Lond., 392A, High Road, Chiswick; Mayston B. Bond, M.R.C.S., L.R.C.P.Lond., D.P.H.(Camb.), 30, Brook Green, W.; J. Basil Cook, M.D.Vict., M.R.C.S., L.R.C.P.Lond., Kensington Infirmary, W.; A. H. Gerrard, M.B.Lond., M.R.C.S., L.R.C.P.Lond., "Lismore," Sutton Court Road, Chiswick, W.; W. L. Harnett, M.B.Camb., F.R.C.S., St. Thomas' Hospital, S.W.; Richard Neville Hart, M.R.C.S., L.R.C.P. Lond., West London Hospital, W.; Edward Brereton Hill, B.A., M.B., B.C.Cantab., M.R.C.S.Eng., L.S.A., 6, Bath Road, Bedford Park, Chiswick, W.; G. Micklethwaite, B.C.Cantab., M.R.C.S., L.R.C.P.Lond., The Mount, York; Donald Sage Sutherland, M.D.Glasg., Met. Asyl. Board, S.W. Hospital, Stockwell, S.W.; James Wallace, M.A., M.D.Aberdeen, 7, Elmwood Gardens, Acton Hill, W.; Hamilton Wright, M.D.Montreal, West London Hospital, W. (*Foreign list*).

A Case of Congenital Syphilis of the Tongue.

Mr. BIDWELL: This patient, who is a married woman, aged 27, has a fissured condition of the tongue, which has existed from infancy. The tongue is crossed by transverse and longitudinal furrows, and is ulcerated on its edges; the ulcers are acutely painful, and the pain was increased by iodide of potassium. The ulcers, however, quickly healed under mercurial treatment. An interesting point about the case is that the patient has never had any miscarriage, she has borne several healthy children, and during the last

pregnancy had acute ulceration of the tongue, but the pregnancy proceeded to term, and the child showed no symptoms of congenital syphilis.

A Case of Congenital Papilloma of the Tongue.

Mr. L. BIDWELL: This man, aged 27, is a patient of Dr. Beale's, who is unfortunately unable to be present. His tongue is large, and the papillæ at the edges are greatly hypertrophied with deep fissures between them. There is no ulceration, and there are no scars of former ulceration. The patient has had this condition since birth, and has suffered no inconvenience from it.

A Case of Myoclonus.

Dr. SEYMOUR TAYLOR: Harry B., aged 23, barman, was admitted into the West London Hospital on October 12, 1905, suffering from clonic spasm of the muscles of the neck and shoulders, which had existed five days. He had a similar attack affecting the arms seven months ago. There is a history of domestic worry and also of acute rheumatism two years ago, and these conditions are the only ones which can be ascertained from his previous history, which can be said to have had any influence predisposing to his present condition.

The convulsions are clonic; they subside during rest, and disappear entirely during sleep. They are increased when he is under examination. The muscles chiefly affected are the sterno-mastoid, platysma-myoides and the acromial fibres of the trapezius on both sides. To less extent the triceps and the latissimus dorsi are involved, especially on the right side.

The patient has been kept in bed for ten days, and treated with tincture of hyoscyamus, but with little favourable result. Seven days after admission the clonic spasms became much worse, and extended to the bulk of muscles known as erector spinæ, and he lay in bed in a position of opisthotonos, though the spasms were still clonic in character. A strong application of interrupted current to the neck was now administered, with excellent results. The spasms were immediately controlled, and practically ceased after a second application of the electricity on the following day. He was discharged from hospital on October 24 as cured.

The convulsions have reappeared since he returned home, and are again characteristic. During rest there is no movement, but when under examination, or if he attempts to walk, the head and shoulders are jerked back, the angles of the mouth are depressed, the forearms spasmodically extended, and there is some difficulty in walking, owing to similar movements in the muscles of the hams. The diagnosis is in

favour of the attacks being functional in character, and it is proposed to continue the electrical treatment in the out-patients' department.

Mr. D. J. ARMOUR: I should like to ask Dr. Seymour Taylor if he thinks there may be a reflex exciting cause to this condition. I mean by that some localised condition which, acting on a nervous system of unstable equilibrium, is sufficient to start the spasms.

Dr. LEONARD DOBSON: I remember having a case of a man who came to me suffering considerably from spasm of the platysma-myoides and the muscles of the left side of the face and eye. This attack came on after a considerable worry, due to loss of money, and I recognised the case as a functional one. I treated him with applications of the faradic current, and the trouble quickly disappeared.

Two Cases of Coxa Vara of Adolescence

Mr. MCADAM ECCLES: I am particularly pleased to be able to show two cases of "Coxa vara of Adolescence" to-night, from the fact that I believe the credit of having described the condition—true, under another name—belongs to the distinguished founder of this Society, Mr. C. B. Keetley. I would define coxa vara of adolescence as that condition of the femoral neck which occurs in adolescence apart from injury or evident inflammation, where the neck has its angle considerably diminished and marked deformity results. Time will not permit me to enter into a discussion of the causation of the lesion, which is very obscure, and the cases of it by no means common. I will, however, allude to what are the chief results, and which have been well evidenced by the cases I have shown. These signs in brief are:—the great trochanter is well above its normal level, the limb is shortened, abduction is markedly diminished, and the foot is everted (figs. 1 and 2). It has not been my experience that these adolescent cases have suffered much, if any, pain, and I look upon the absence of this symptom as one of the points in the diagnosis from morbus coxæ. Skiagraphy has undoubtedly greatly aided in diagnosis and beautifully illustrated the lesion. The condition seriously interferes with the comfort and freeness of walking and other movements. I very much fear treatment of any kind in bad cases is of very little use.

Both cases are young males, one 19, and the other 16 years of age; their disease has only been of short duration, one eight months, the other fifteen months. One has had some pain, and has genu-valgum; the other has had absolutely no pain. In neither has there been any accident. Both have the high trochanter, the shortening, and the limitation of abduction.

Fig. 1

Coxa vara of adolescence (back view).
The high trochanter and the shortening are well seen.

am sure there are many of the adolescent period which cannot have injury given as a cause.

A Case of Tumour of the Jaw.

Dr. LEONARD DOBSON: The patient I have brought here to-night is a man, aged 56. Some eighteen months ago he first noticed a swelling in the floor of his mouth beneath the tongue. He came to me a year ago, when the swelling was about the size of a large filbert. It was somewhat hard, elastic, and without any sense of fluctuation. I considered it to be a cyst formed by the plugging of the salivary duct with a calculus, but it was somewhat harder than is usually met with in these cases, and with a needle I was unable to feel any calculus.

I lost sight of him until March, when he called again. The growth was now very much larger, but not so big as at present firm, elastic and somewhat nodular. Under cocaine a wedge-shaped piece of the growth was cut out, opening up a cavity which was extremely small. No calculus was found. The piece removed was examined and it was reported as non-malignant. The growth shrunk somewhat in size after this but not to any extent, and again I lost sight of him until a few days ago when he called, and showed himself as you have seen him. The growth is now much larger, it has the same characteristics as before, namely, it is firm, elastic, nodular, and gives no sense of fluctuation. It interferes greatly with speech and mastication. There is a small enlarged gland under the ramus of the jaw.

Personally, I think this is an adenoma of the same nature as the tumours found in the paratoid gland, both on account of its nature, the length of time since it put in an appearance, and the microscopical aspect of the piece removed, but I confess it has a very suspicious appearance, and it will be interesting to hear the opinions of those who have seen it. It should of course be removed.

Mr. L. BIDWELL: I had the opportunity of seeing this case before Dr. Dobson operated, and I fear that I gave a wrong diagnosis. I thought then that it was a case of salivary calculus blocking the sublingual duct. I think that the tumour is exactly similar to the mixed parotid tumour, which was formerly considered to be an adenoma, but now is thought to be a mucoid sarcoma. The condition has been mistaken for carcinoma, but fortunately for the patient, the prognosis after free removal is very good.

Mr. CECIL LEAF: With regard to the question of the tumour being malignant or otherwise, I think a great deal of stress should not be laid on the fact that the glands could

not be felt to be enlarged. For in this particular case, owing to the position of the tumour, it is impossible to thoroughly examine the submental group of glands—that is, with one finger placed on the anterior part of the floor of the mouth, and the other making counter-pressure from the outside. And as regards the submaxillary group these glands were often found lying on the deep surface of the submaxillary salivary gland, and so might easily be enlarged without being felt. Owing to the increase in size of the tumour I feel inclined to regard it as being malignant in nature.

Mr. PATON: I have little doubt that this case is a tumour of the sublingual salivary gland of the same nature as those tumours more often seen in the parotid. It will probably be found to contain cartilage as well as fibrous and glandular tissue. There is very good reason for thinking that at least in many cases these new growths are really endotheliomatous in nature, and they vary very much in their life history, in most cases being very slow growing and practically innocent, in others proving very malignant, as was seen in a case a little time back under my care occurring in the submaxillary gland.

A Case of Osteitis Deformans.

Dr. ARTHUR SAUNDERS: This woman, aged 69, is a well-marked case of osteitis deformans, or Paget's disease. She is the mother of three children, the youngest having been born thirty-seven years ago. Although she has only recently consulted a doctor for her condition, the history of her case shows that the disease has run an extremely chronic course. A photograph, taken seventeen years ago, shows even at that time the thickening of the malar bones and zygomatic processes to be well marked. Six years ago she noticed that her legs were becoming "bandy," and her friends remarked that she was getting shorter than ever. In January of this year, as her spine was very painful, and was getting broader and more bent, she consulted Dr. Dendle, of Isleworth, who, struck by her bowed figure and "leonine" aspect, sent her to me to confirm his diagnosis of osteitis deformans.

In August of this year she was seized with an attack of acute iritis in both eyes, but soon recovered. She complains now of being easily fatigued, and of pain of an aching character over the vertex and in the back. She presents great thickening of the malar bones, the superior maxillæ and the zygomatic processes. She has noticed that she has been able to see her right cheek for some six years, and just lately has noticed that her left cheek has also become visible to her. During the last three months bosses have formed on the vertex over the upper part of the left frontal and over the

left parietal regions. The spine has a marked kyphotic curve, and the vertebræ are broad and thickened. The femora, tibiæ, and fibulæ are much thickened and curved, both antero-posteriorly and laterally, the bones of the arms being curved also to a slighter extent. Other bones are no doubt also affected in a similar way. It is interesting to note that she has a slight goitre which has been present certainly for thirty years, but she presents no symptoms of "athyroidism," unless the slight dryness of skin and the fact that her hair comes out easily are possibly due to this. She is in perfect possession of all her faculties, with the exception of being slightly deaf. There is no affection of general health.

Her facial aspect, the bowed figure, the waddling, tottering gait, with the extreme curvature of the legs, are all typical of the disease.

Treatment has been directed to the giving of good nourishing food and the exhibition of iron, arsenic, and cod-liver oil.

A Case of Myxœdema.

Dr. ARTHUR SAUNDERS: This patient, who was exhibited by me at a previous meeting of the Society (WEST LONDON MEDICAL JOURNAL, 1903, viii., 2, 123) is a case of myxœdema now under treatment with dried thyroid gland substance, of which she takes 10 grains per diem. There is but little in her appearance now to suggest myxœdema, though her hair is dry and somewhat sparse. She has occasionally, in the two and a half years during which she has been under treatment, left off taking the thyroid gland substance, but in from six weeks to two months she finds that she becomes so stout and languid, and her hair comes out so easily, that she is glad to return to her treatment. Her skin at that time also becomes dry and scaly, her speech becomes affected, her tongue seems large, and she says her throat feels thick, and makes her inclined to choke. She also gets depressed in spirits, and finds it takes her a much longer time to get through her work. All these symptoms rapidly disappear on a return to thyroid treatment.

A Case of Acromegaly.

Dr. RUSSELL, under whose care this patient is, much regrets that he is unable to be present to-night, and asks me to show him in his stead. He also has been already exhibited before the Society (WEST LONDON MEDICAL JOURNAL, 1905, x., 2, 124), but it was thought it would be interesting for members of the Society to have an opportunity of seeing him in conjunction with the two previous cases. Pierre Marie pointed

out that typically in osteitis deformans the face is roughly triangular, with the base downwards, in acromegaly egg-shaped and in myxœdema round.

During the last six months in this patient there has been no increase in the size of the head. He has had, however, occasional fits, with loss of consciousness, lasting a few minutes, and on one occasion followed by some temporary weakness of the left side. There is frequent headache, and also slight but definite diminution of the visual fields on the temporal side. These symptoms point to the probability of a tumour of the pituitary body being associated with his condition.

He has been taking 9 grains of dried pituitary body daily, and says that since this he has considerably improved in general health.

A Case of Extreme Gouty Enlargement of the Fingers.

The patient is a man 58 years of age. When a young man he worked in the pottery trade, afterwards becoming a tram conductor, which latter occupation he had to give up finally on account of the affection of his hands. At the age of 32 he had his first attack of gout in the right great toe-joint, and since then on several occasions acute attacks in both great toe-joints, hips, knees, ankles, shoulders, elbows, wrists and fingers; he has been laid up for as long as seven weeks at a time. His latest attack was yesteaday, when he had gout in his left wrist-joint. He has always been a temperate man, and there is no arthritic family history. Both hands show much deformity, this being chiefly marked in the first and third digits of the right hand, and the second and fourth digits of the left hand. In places the skin has been ulcerated through by the pressure of the deposit, and there is a discharge of the contained urate of soda. The patient obtained relief five years ago from surgical treatment, when eleven incisions were made in the right hand and thirteen in the left. During the past four weeks electrical treatment by means of kataphoresis has been adopted, but without any benefit to the patient, who says, in fact, that his hands have since been more tender. Mr. Paget proposed, therefore, to take him into hospital and to try the effect of surgical measures again.

Many of these cases show, on examination by the X-rays, marked destruction of the articular ends of the bones, and this is well seen in the skiagram which has been handed round, the articular surfaces of most of the interphalangeal joints in this particular case being much eroded, and the joints themselves disorganised.

ORDINARY MEETING.—Friday, December 1, 1905.

LEONARD BIDWELL, Esq., F.R.C.S., President, in the Chair.

The minutes of the last meeting were read and confirmed. The following gentlemen were elected members of the Society: Ernest Bonny, M.R.C.S., L.R.C.P.Lond., Kensington Infirmary, Church Street, Kensington, W.; J. H. Ebell, L.R.C.P., L.R.C.S.Ed., Ceylon Medical Service, Ceylon; Alexander R. Falconer, B.A., B.Sc., M.B., B.Ch. (N.Z.), D.P.H.Lond., "Roslyn," Dunedin, New Zealand; Daniel C. O'Connell Finnigan, M.D.Berlin, M.R.C.S., L.R.C.P.Lond., 5, Windsor Road, Ealing; Geo. Kerr Grimmer, M.D.Edin., F.R.C.S.Edin., "Roseneath," Hounslow; Francis Hare, M.D.Durh., M.R.C.S., 93, Church Road, Upper Norwood, S.E.; John William Sames, M.R.C.S., L.R.C.P.Lond., Morton House, 135, Avenue Road, Acton, W.; John Francis Taylor, M.R.C.S., L.S.A.Lond., Fairlight House, High Road, Leyton, N.E.; John Henry Wolfe, L.S.A.Lond., "Inglewood," Seward Road, Hanwell.

Dr. S. A. Bontor read a paper on "Jamaica as a Health Resort," which was illustrated by many interesting and beautiful lantern slides (see p. 1).

Dr. W. S. Colman read a paper entitled, "Notes on French Health Resorts," which was also illustrated by several photographs and slides (see p. 4).

Dr. P. ABRAHAM: I wish to compliment Drs. Colman and Bontor on the great interest of their papers, and on the excellence of the photographs shown. I agree with Dr. Colman that Great Britain and Ireland possess just as good mineral waters as any to be found abroad, but regret that I cannot agree that the baths are as a rule so well managed, or that the patients derive as much benefit as at some of the Continental Spas. I speak with particular reference to skin cases—many of which I am accustomed to send to various baths. Among other points to which I might allude, there is too much routine treatment at the English watering places—all cases being treated practically alike. I have found sulphur waters extremely useful when properly applied in seborrhœic eczemas and many other diseases of the skin. It is essential that the mineralised water should be locally massaged, if possible, into the parts affected; more than once I have sent a patient with obstinate seborrhœa of the scalp to a British sulphur spring, and after some weeks the patient has returned with little or no improvement—the scalp had not been locally treated, the doctor having simply ordered so many general baths per week, and so many 12 ozs. of sulphur water to be imbibed every morning—just the

same treatment, in fact, as for the usual cases of gout and rheumatism that frequented the spa! At another much advertised watering place, where they really had a good sulphur water, containing SH_2, and alkaline sulphides, they pumped the water into a large tank, from which the baths were supplied, and by the time the water was used all free sulphur had escaped, and it was ridiculous indeed to call it a sulphur bath. Another point is the high charges they make for the baths at our British Spas. One is afraid to send any but very wealthy patients to them.

Having spent the first four years of my existence in Jamaica, and again two years in the '70's, I am particularly gratified to hear Dr. Bontor's appreciation of that beautiful island. It is interesting to hear Jamaica now being talked about as a health resort. I can remember the time when it was classed by the untravelled and uninformed with West Africa, as a kind of "death trap." There was of course some excuse for this ignorance; for sometimes very terrible things happened, *e.g.*, I knew of the following instance: fifteen young Scotchmen went out as "book-keepers" to some sugar estates in St. Thomas'—a district certainly not very healthy; in two years only three of the fifteen were alive! But it was not altogether the climate, it was "new" rum, a very deadly fluid! Now lots of people—steady, sober fellows (like, *e.g.*, my colleague, Dr. Robinson and myself), could live healthily enough in Jamaica; but the young fellows who came out from England, Scotland, and Ireland, used to do very silly things, and many of them drank too much—particularly beer and new rum, playing the dickens with their livers and kidneys and rendering them sorry subjects for an attack of fever. As a Jamaica man, I do not want to say a word against good old rum—an excellent drink in moderation, *i.e.*, a little of it at the bottom of a large glass of iced water! If a man stuck to that it did him no harm. I can instance the case of a resident magistrate who retired upon full pay after forty years service in the Island; he used to imbibe at least a bottle of old rum every day. He inherited a property in Roscommon, Ireland, and came home to enjoy it when about 65 years of age, as hale and hearty an old boy as you would wish to see. Within a year he was dead; and his Jamaica friends believed that it was the change of liquor from rum to whisky that did it.

When I was last in the Island several cases of yellow fever occurred; the principal of Spanish Town College contracted it, got better, and while convalescing was invited to stay up in the mountains, near New Castle, with the then Attorney General of the Island, Mr. Schärlieb, and his sister. Both the latter took the disease and died; this was considered extraor-

dinary, as yellow fever was not known in the mountains. I saw something of the disease myself—nursing a friend with it for the last ten days of his life. Beyond swallowing five drops of pure carbolic acid every morning in half a tumbler of water, I took no special precautions. We buried the poor fellow in the nearest churchyard, 9 miles away, taking the coffin on a very primitive cart, the driver sitting on the coffin. Curiously enough this man, a full-blooded negro, developed the disease and also died; another man, half-cast Cuban, on the estate was also affected, but he recovered.

Dr. Bontor has mentioned the Jamaica ticks; this pest is since my time, and is largely due to the introduction of the mongoose from India for the purpose of exterminating the rats that did so much damage to the sugar canes. I recommended this to a large sugar planter, and I am sorry for it! The mongoose rapidly multiplied and not only ate rats, but every other small creature, bird or beast, they could get at, as well as the bull frogs, which had until then kept down the ticks! He has also mentioned the Jamaica fruit, and shown a very beautiful photograph of a "forbidden fruit" tree. Tradition has it that this was the very fruit with which the wicked serpent tempted Eve. However that may be, it is very delicious and sweet. I observe that it is the fashion now-a-days to adopt the American name for it, "grape fruit," why I do not know; and I cannot accept the description lately published in the *British Medical Journal* as the best way of eating the fruit; it should not be cut with a knife, as the bitterness comes from the skin around the pulp; it should be pegged, the skin of each peeled off, and the pulp only eaten. A good one requires no sugar. The British public do not know what a good ripe one really is, or, for the matter of that, even a good banana, which is sent away before it is properly ripe.

Mr. C. B. KEETLEY: I think Jamaica might be well chosen for the site of an establishment for the treatment of syphilis. Its warm climate, the comparative cheapness of labour and human muscle (useful for purposes of massage), the bright sunlight, the excellent air, and the sea-voyage home after the treatment, should all recommend Jamaica for the purpose.

No small amount of the benefit got from a visit to a Continental watering place is due to the earlier hours which it is the rule to keep in France and Germany as compared with this country. Moreover, in these countries, spa treatment is generally followed more strictly, as well as more carefully, under the supervision of the local physicians.

Dr. BOYD JOLL: I think I may say that I have probably as much personal experience of the French watering places as any member present, as during the past five years I have

visited nearly a hundred of the French hydropathic establishments and sanatoria. I have visited for four consecutive years with Professor Landouzy with the Voyages d'Etudes Médicales. On the first trip I was the sole English representative, when we visited the watering places in the Vosges district, of which Vittel, Contrexeville, and Plombières were probably the best known; the following year we had six English visitors, when we visited the watering places of the Eastern Pyrenees, viz., Aix les Thermes, Amelie les Bains, Mont Louis, Banyuls, &c., probably less known to most of the English; the third year we visited the Auvergne district, better known to us, viz., Vichy, Royat, Mont Dore and La Bourboule, &c., and this year we visited the Western Pyrenees, stopping at Luchon, Cauterets, Eauxchaudes, Bagnières de Bigone, Biarritz, &c., when we had twenty English members with us; so the popularity of the French watering places is evidently becoming more evident and pleasing to English doctors. While admitting that we have mineral waters and thermal stations where hydrotherapeutic treatment can be carried out in this country, they are far more numerous, widespread, and situated in much more beautiful surroundings in France, and the treatment is much more effectively and systematically carried out, both as regards the baths and the water-drinking, under medical supervision, and there is attached to most of the "établissements" an elaborate system of douching, massaging, inhalation, as well as mechanical and electrical forms of treatment for the numerous maladies which are annually taken there for "the cure," which in many cases is quite successful, or the patients are materially benefited. This is largely enhanced by the luxurious hotels, the beautiful air and sunshine, and the charming scenery which surrounds the watering stations, and by the casinos and numerous entertainments, which help materially to make the prolonged stay in these resorts as pleasurable as possible, and this in conjunction with the scientific and business-like treatment which the patients receive there, make them much more attractive than that which is dispensed in the English watering places.

I am sorry time prevents my going into more detail of the various forms of treatment which are carried out in France, and I would strongly urge those who are wishful to emulate the treatment in England of our friends across the sea, to go and see for themselves the manner in which they treat their patients and benefit them as well as the doctors themselves.

Dr. LEONARD MARK: I have listened with great interest to Dr. Colman's paper, as it brings back to mind many happy days that I have spent in France. I have been over most of

the ground he describes, and over some of it on foot, in my student days. Lately I went on an excursion to some of the Pyrenean stations following upon the medical visit to Paris, and several members of our Society were of the party. We visited Biarritz and Pau, then Cauterets, where the sulphur waters are so useful for chronic diseases of the nose and throat, also Salies, where the waters are so saturated with salt, more so than the sea, with a specific gravity so great that the patient has to be put into the bath with lead weights fixed to his body to prevent him floating on the surface like a cork. These waters have the power of reducing fibroid tumours and getting rid of pieces of dead bone in chronic periostitis. In some of the cases I was shown, one felt inclined to think that the proximity to Lourdes (another of the places we saw) was accountable for a miraculous element in the cure. Our journey was ably planned by the Syndicate of the Western Pyrenees, composed of medical men, engineers and hotel-keepers, who do much to get the interests of their towns looked after and to obtain improved services of trains. A lesson might well be taken by some of our English watering places.

I should like to say even more than Dr. Colman about the beauty of the localities. That of the Pyrenees has been much expatiated upon. The centre of France is less known. Royat and Mont Dore are delightful places. Anyone fond of walking and interested in geology could spend a delightful fortnight, as I did once, wandering about the extinct volcanoes and the sources of the Loire, coming across many interesting but little known mineral springs and most picturesque villages.

Aix les Bains is better known to our English patients, who flock there in June, and where twenty-one days spent in going through a course of douches enables many of them to tolerate their gout and osteo-arthritis during the remainder of the year. It is well worth going there to see how much can be done for some bad cases. I was much impressed on my visits there with the infinite care the medical men took in supervising the douching, which commenced at 4 or 5 o'clock in the morning. Here, again, the surroundings are lovely. The drive from Chambéry to the Grand Chartreuse is, perhaps, the most famous in Europe for its beauty. Savoie and Dauphiné are far too little known to the British traveller, and are just as easy to reach as Switzerland. At Aix, as well as other places mentioned, everything is done for the comfort and enjoyment of the bathers and visitors. Who knows whether it may not have been here, close to Chambéry, which is mentioned in the "Sentimental Journey," that Sterne may

have been the first Englishman to say: "They order these matters better in France"?

Dr. BONTOR, in reply: The most suitable cases are those requiring rest and an equable warm temperature, the class of case that is sent to the South of France, Egypt, &c., those suffering from catarrh, some forms of Bright's disease, and more particularly those suffering from overwork; they are cut off from the outside world for at least ten days, and they must be away for at least a month, the Elder, Dempster Company, chiefly in their interest, having so far decided not to instal wireless telegraphy on their ships.

Jamaica is frequently advised as a place most suitable for consumptives, but I am strongly of opinion that at present it is unsuitable, quite unsuitable for them; there are positions in Jamaica, for example, in the Santa Cruz Mountains, where sanatoria might be established and would probably give most excellent results, but at present the means of transit and the absence of suitable sanatoria absolutely negative any idea of this sort, while the promiscuous dumping of infectious physical degenerates on to one of the most beautiful spots on God's earth, would be an act verging on sacrilege.

As regards the treatment of syphilis, I have no doubt that suitable provision could easily be made. Syphilis is very prevalent among the black population—in fact, I saw in the hospital in Kingston some of the worst cases I have ever seen—and there are several bathing establishments which could very quickly be brought up to modern requirements, while the negro woman would make a most efficient masseuse, but I very much doubt if the negro man would ever be induced to persevere in the training necessary to make him an efficient "rubber."

Of the hospitality of the Island I cannot speak too highly—there is nothing in this country at all comparable to the way everyone in Jamaica does the best for you and tries to make you comfortable.

The Mirror of Practice.

A CASE OF GALLOPING PHTHISIS OR ACUTE CASEATING PNEUMONIA.

By Samuel West, M.D., F.R.C.S.

When possible, the most instructive way to study medicine is, after careful clinical investigation, to follow the patient to the *post-mortem* room and check the diagnosis by the autopsy. I propose to follow this course in the case I now describe.

Thomas B., aged 40, a signalman, was in his normal health until the first week in September, when he developed a cough, which, however, in a few days disappeared. The breathing then became short and some swelling in the legs appeared. After a fortnight he gave up work and came to the hospital, where he was admitted on September 19. He looked pale and ill; had a temperature of 102·3°, respiration 26, pulse 108.

He presented the physical signs of marked consolidation of the left upper lobe, and expectorated a little rusty sputum. Although he had been ill rather a long time, the diagnosis was made of acute pneumonia.

A fortnight later, October 3, I saw him. He had been then just one month ill. There was then stony dulness over the whole upper part of the left chest, back and front. The vocal resonance was greatly increased and the breathing was markedly bronchial. Pleuro-pericardial friction was audible near the apex of the heart, and in the 2nd intercostal space near the sternum the crepitation was sharp, clear and crackling. There were two patches of still more extreme dulness, one just above the left nipple, the other at the angle of the scapula. The temperature was of a hectic character, oscillating daily between 99° and 102° or 103°. The respirations averaged 26 and the pulse 108.

The œdema of the legs was referred to cardiac weakness and the retention of urine to general debility, both consequent on his illness. The man was suffering evidently from a recent consolidation of the lung with fever. The question was what was the nature of it. Ordinary pneumonia it could hardly be, on account of its duration and the irregular character of the fever. New growth was unlikely as it had reached too great dimensions for the time it had lasted, and except as the result of some complication there ought to be no fever. Could it be empyema? The dulness was absolute enough, the temperature would do for it, and of course there are cases of effusion, where the voice and breath sounds are exaggerated. To exclude such a possibility a needle was inserted at the angle of the scapula, where there was the patch of extreme dulness, and some blood-stained fluid was obtained. The next day a larger needle was used and about 8 ozs. of similar fluid removed by the aspirator. It was evident, therefore, that what was present was chiefly solid lung. The blood-stained character of the fluid pointed to one of two causes—new growth or tubercle. Pathological examination of the fluid was negative and gave no help in the diagnosis. The facts seemed to point clearly to tubercle as the cause. This would explain the man's serious condition of illness and the hectic fever. On the other hand, there was no sweating, but in the most acute form of tuberculosis this is often absent, and the skin may be dry. If tubercular, the consolidation must be very extensive, massive, of rapid development, and attended with little or no breaking down, so that it must be that form of tuberculosis known as acute caseating pneumonia, or acute pneumonic

phthisis. A rare condition, but the only one which would explain the facts well.

Everything was done by food and stimulants to maintain the strength. Caffein and strychnine were given to assist the heart, and full doses of Liq. hydrarg. perchlor. prescribed. Under these remedies the patient improved and said he felt better, the œdema of the feet disappeared and the urine was passed naturally.

On October 13, the day following the paracentesis, the left side, which had been so dull, was found to be hyper-resonant, and it was evident that pneumothorax had supervened. The bell sound was obtained early that morning but never after. There had been no symptoms whatever at any time to suggest pneumothorax, and the condition was discovered only by physical examination.

By October 31 all the signs of pneumothorax had disappeared, the dulness had returned and the physical signs were the same as before the attack. The voice now became husky and hoarse, and a troublesome cough developed, but there was no sputum. The patient had had no cough at all during his stay in the hospital till now, neither had there been any expectoration since the sputum was tinged with blood on the day after admission.

By November 3 the voice was completely lost, the patient talking in a hoarse whisper. This suggested tuberculosis of the larynx, but the man was too ill to be disturbed for laryngoscopic examination.

On November 4 the patient brought up a little sputum for the first time, and examination showed the presence of numerous tubercle bacilli.

The man now sank rapidly and died on November 10. The temperature throughout had been hectic with daily oscillations from 99° to 103°. The pulse averaged at first 108 and the respiration 26, but towards the end both increased in rate to 116 and 32 respectively.

The total duration of illness from the time when the man believed himself to be in good health was not more than ten weeks.

The *post-mortem* examination revealed the following conditions. The whole left lung formed a solid mass with rounded edges, firmly moulded to the ribs, and so dense that it stood up of itself. It had the extraordinary weight of 66 ozs. or 4½ lbs.—heavier than a normal adult liver. On section nearly the whole of it was in the condition of yellow caseous consolidation, showing a smooth, uniform, cheese-like surface. The portion along the vertebral border, though equally solid, had a reddish-grey colour, and was evidently in a somewhat earlier stage of the disease.

The only cavities present were one or two tiny ones at the apex with fibrous walls, and therefore of older date. The pleura contained no air and no fluid. The visceral surface was rough and shaggy, and adherent in places; and beneath it in many places were recent hæmorrhages, especially in the lower parts. At the extreme apex there were a few old adhesions.

The right lung weighed 32 ozs., and showed a few patches of recent caseous pneumonia in the apex, with one or two tiny recent cavities, while grey tubercles were scattered freely throughout the rest of the upper lobe.

The right pleura contained 20 ozs. of clear serous fluid. There were recent adhesions below and a few old ones at the apex. One softening caseous gland was found at the bifurcation of the trachea. The larynx and adjacent parts of the trachea showed several superficial tubercular ulcers, and tiny grey tubercles were scattered freely over the epiglottis, trachea and main bronchi, especially on the left side. With the exception of one or two tiny grey tubercles in both kidneys, there were none in the other organs of the body.

The bladder was in a condition of catarrh, but showed no tubercle.

The heart was dilated and flabby. The rest of the organs were normal.

The *post mortem* thus confirmed the diagnosis of acute caseating, *i.e.*, tubercular, pneumonia. It showed further that, beside the recent acute lesions, there were old tubercular lesions in the form of small cavities with fibrous

walls in the left apex, with some old pleuritic adhesions there as well as on the right side. The recent lesions were those of inhalation, or aspiration, pneumonia, but no connection between the old tubercular lesions and the air tubes sufficient to explain this mode of infection were discovered. Still the lung records its own history, viz., antecedent chronic tuberculosis with recent infection, probably by aspiration, *i.e.*, through the air tube.

Commentary.

Acute massive caseating pneumonia is the rarest of all the forms of tubercular disease of the lung. Specimens are found by ones or twos in our museums, but compared with the frequency of phthisis, this form is very rare indeed. It is what used to be called acute pneumonic phthisis or galloping phthisis. Yet though rapid phthisis it could not be said to be of short duration, for the patient lived more than two months. So that compared with ordinary pneumonia it was a slow disease.

The diagnosis in these cases may be very difficult in the early days. The onset may be as acute as in ordinary pneumonia. It is, in fact, pneumonia, *i.e.*, acute inflammation of the lung, only excited by the tubercle bacillus and not by the pneumococcus. Even microscopically the diagnosis may not be easy, for there may even be the fibrinous network and hæmorrhagic exudation into the alveoli which is regarded as characteristic of pneumococcal pneumonia, and there may be, as in this case, rusty sputum at first. Yet the clinical course soon raises suspicion that it is no ordinary pneumonia, and this suspicion is confirmed as the case runs on. Sweating, which is so pronounced a symptom in ordinary phthisis, is, as a rule, absent in these acute cases, and the skin is dry and hot as in ordinary pneumonia, though towards the end sweating may develop and be profuse, yet in some acute non-tubercular pneumonias sweating may be pronounced. This is not infrequent in influenza—pneumonia, of which there has recently been a striking instance in the wards. The patient came in with high fever, aches and pains in the back and legs, and copious sweatings. The diagnosis was made of influenza. The next day consolidation developed at the left base, but the sweating still continued. Bacteriological examination of the sputum showed the presence of the influenza-bacillus. The prognosis of pneumonia coincident with influenza is very grave, and, as anticipated, this patient died before the end of the week.

The temperature again, though it may be at first persistently high, soon becomes hectic in character with wide daily oscillations. This, however, again, is not conclusive, for pneumococcal pneumonias may sometimes present marked daily remissions.

New growth was suggested in this case, because of the great extent of the consolidation. The fever and acute illness would then have had to be explained by secondary inflammatory changes excited in the lung. This does occur with some forms of tumour, especially those which compress the air tubes, when in the corresponding parts the lungs pass into a condition of solid œdema, *i.e.*, the alveoli are filled with œdematous fluid, containing many cells, and in this necrotic changes with inflammatory symptoms may develop. But there was no obstruction to the air tubes in this case, on the contrary, the air entered freely, as was shown by the loud bronchial breathing.

Where the physical signs in the lungs are not well marked and do not develop rapidly, the diagnosis must be made by the general signs, and then other difficulties arise.

The hectic fever might suggest suppuration, and especially empyema, the diagnosis from which has already been considered in the narration of the case. Or where the fever is long continued typhoid fever might be suspected.

A very instructive case of this kind came under my observation some time ago :—

A boy, 15 years of age, became rather suddenly ill at school, and was supposed to have a cold. This was not regarded as of much importance, but as he did not improve he was sent home. There he was found to have a high temperature, and as there were some physical signs, apex-pneumonia was diagnosed. The fever continued, and about the third week a surgeon was called in, who discovered nothing surgical and suggested typhoid fever. Another consultation was held, and as the physical signs in the chest had not changed the diagnosis of typhoid fever was confirmed. It was not until after four or five weeks' illness that acute tubercular disease of the lung was diagnosed. The process, which threatened to run a very rapid course, became subacute, and the boy lived for about twelve months, though it seemed at first that he could not live as many weeks.

It is well to be cautious in the prognosis of these acute cases, for though while the fever and constitutional signs remain severe the prognosis is as bad as it can be, still the acute symptoms may subside, and many of the physical signs disappear. These acute cases of phthisis fall into two groups. Both are attended with extensive inflammatory consolidation, but in the one this consolidation is itself tubercular, for the tubercle bacilli are found in the alveolar contents, and it rapidly caseates: in the other the consolidation is simply inflammatory and not really tubercular. This may then resolve and disappear. This is no doubt the explanation in the following case :—

Some years ago I saw a young man, 19 years of age, who had developed acute tubercular mischief. This threatened to run so rapid a course that I felt doubtful if his parents, who were abroad and required four weeks to get home, would arrive in time to see the lad alive. Yet the disease gradually

lost its acute character, and in six months many of the patches of consolidation had disappeared. He then went to Australia, and when last heard of was leading an active life on horseback and managing an estate, with but little evidence, it was said, in his chest to indicate the grave danger in which he stood a year or so before.

Such experiences are rare, as, indeed, these acute cases are, but they occur sufficiently often to make caution in prognosis advisable, even where the prospect at the time seems as bad as it can be.

I do not know that much can be done by drugs. The only remedy which appears to have any effect is mercury in full doses, preferably, I think, in the form of the biniodide, if it can be taken without irritation.

A few further points in the case deserve consideration.

(1) *The Absence of Expectoration.*—Except for a little rusty sputum on admission, there was no expectoration till a week before death, and then it was very scanty. It is not clear that even this came from the lungs, as it might have been derived from the larynx and upper part of the trachea, where acute tubercular ulceration was found *post mortem.*

(2) *The Slight Amount of Cough.*—The illness commenced with cough, which, however, disappeared in a few days. While in the hospital the patient had practically no cough at all, until about ten or more days before death, and then a troublesome cough set in, which was coincident with the onset of hoarseness, and due to the disease of the vocal cords. I remember the case of a young lady, 16 years of age, who died of acute pneumonic phthisis, and similarly she had neither cough nor expectoration until the last week of life.

(3) *The Rapid Onset of Tubercular Disease in the Larynx.*—The voice was quite natural until October 31. It then became husky, and in four days (*i.e.*, by November 3) it was so completely lost that the patient could only talk with effort in a hoarse whisper, and coincident with this there developed the troublesome hacking cough. *Post mortem* all was explained by the acute tubercular ulceration found on both vocal cords, and above and below them as described.

(4) *The Pneumothorax* is the last and perhaps most interesting point in the case. It has already been pointed out that its occurrence was in all probability spontaneous; anyway, it developed without any symptoms, and was discovered only by physical signs. The urgent symptoms in pneumothorax are due to the embarrassment of the circulation and respiration consequent upon the sudden collapse of the lungs. In time, if the patient lives, the heart and lungs adapt themselves and the urgent symptoms pass off. In a case like this it can matter little whether the lung is useless from consolidation or from collapse, but there was no sudden disturbance of

function, and therefore no urgent symptoms. It is not altogether rare to observe this in acute phthisis. It is obvious from the massive consolidation of the lung that there was not room for much air in the pleura. Whatever there was was rapidly absorbed, and no effusion took place into the pleura. The adhesions which were found were doubtless of tubercular nature, and some of them of long standing. It is interesting to observe that in a case which was rapidly dying of phthisis and in which the pleura was itself extensively tubercular, the air was so rapidly and completely absorbed that the pneumothorax had completely disappeared within a fortnight. I have seen exactly similar cases before.

THE CASE OF A "BLIND" MAN.

By Percy Dunn, F.R.C.S.

Ophthalmic Surgeon to the West London Hospital; Lecturer on Ophthalmology at the West London Post-Graduate College.

Everyone is familiar with the object in the London streets of the "Blind" man. He is accompanied, or not, by a dog leading him. His face is directed boldly forwards and upwards; he carries a stout stick with which he keeps banging the pavement in front of him to indicate to all the necessity of moving out of his way; should he happen to be jostled he vigorously repels the carelessness of the passer-by, for in order that there may be no mistake the word "blind" is suspended from his neck, under which he claims perfect freedom of movement. From a casual glance at such a man's eyes it is sometimes possible to determine the cause of the blindness, as, for example, when the corneæ are completely leucomatous. In other instances, however, nothing is apparent externally, and this was the case in respect to the man whose notes I give below, who was sent to me from the medical side of the hospital for a report upon his eyes.

On November 18, 1905, a pale-faced man, aged 58, was brought to my out-patient room with the legend "blind" suspended over the front of his chest. He gave the following history: Eighteen years ago he attended the ophthalmic department of this hospital in consequence of failure of vision. After some weeks' attendance, however, no relief having been obtained, he was advised to transfer himself to the then Moorfields Eye Hospital, where he attended for two years, with a similar result. He then placed himself in the hands of a gentleman who conducted an eye business—the gentleman has since died, but his widow continues the enterprise—in the

Marylebone Road. But here the difficulty was that the drops with which he was supplied caused so much smarting to his eyes as to disturb his comfort, while no improvement followed in respect to his sight. After that he passed under the treatment of a lady doctor, skilled, so he said, in all pertaining to diseases of the eye. Her attentions, however, were necessarily limited, inasmuch as the fee of two shillings and sixpence, required for each visit, was more than his slender resources could afford. Thus it was that after many years, having wearied with the advice of many physicians, surgeons and others, without receiving any benefit so far as his sight was concerned, he eventually drifted back to the West London Hospital, complaining of rheumatic pains in his limbs, for which he was under treatment when he was referred to me. His loss of sight, he said, was due to blood poisoning eighteen years ago.

I proceeded to the examination of his eyes with interest, not knowing what I should find; but for the result I was quite unprepared. The globes were natural externally; the ocular movements quite free; the lid muscles normal. The corneæ were clear, the pupils were contracted, about 3½ mm., and showed no reaction to light, but contracted to accommodation. The media were clear, while both discs showed advanced primary atrophy, with marked atrophic excavation. The diagnosis thus far being manifest, he was examined for his knee-jerks, and these were found to be absent. The case was, therefore, one of tabes, and the blindness—he only admitted to perception of light in each eye—was tabetic in origin.

Remarks by Mr. Percy Dunn.—Tabes is one of the most interesting general diseases with which the ophthalmic surgeon comes in contact. In the early stages, at all events, there is commonly a subtlety about the symptoms which may, perhaps, in some cases lead to the diagnosis being overlooked. But so far as the ocular signs are concerned the more anomalous they are the easier, in a sense, is it for their true origin to be suspected, for by the method of exclusion the ophthalmic surgeon is at once prompted to enquire into the possibility of tabes. Again everyone knows, of course, that the more pronounced are the ocular signs the less manifest are the general symptoms. In the diagnosis of the pre-ataxic stage special attention should first be directed to the integrity of the external ocular muscles. The muscle most commonly affected is the external rectus. But there is no absolute rule as to this, and any orbital motor nerve may be initially involved, leading to evidence of muscular paresis. Then in the advanced stages of the disease a very interesting

muscular condition is sometimes met with, namely, that known as ocular ataxy, such as was well marked in a case sent to my out-patient room by my colleague, Dr. Davis. This ataxic condition may be mistaken for nystagmus, but the differential diagnosis between the two is perfectly simple. The patient in question, a man, aged only 38, was otherwise remarkable by the performance which he exhibited when invited to walk. He had to be supported by a porter on one side and by a friend on the other, and the pathological pantomime which resulted was so profuse of humour that any one desirous of a gratuitous entertainment to cheer their spirits on a foggy day had better apply to Dr. Davis. Even the man himself could not avoid smiling when the performance was in progress. What precisely amused him was evidently the exclamations of his supporters, whose innocent and unsuspecting shins from time to time came violently into collision with his boots. In the opinion of the man's friends he was not paralysed; for the shins of all of them have repeatedly been impressed with the hall-mark of vigorous, though uncontrolled, muscularity. And so much has this been the case, that latterly many of his personal friends have ceased to evince any special anxiety to pay him a visit. Illustrative of the value of testing the ocular muscular integrity was a case recently kindly sent me by Dr. Shaw Mackenzie, of Green Street. The gentleman came complaining of giddiness, with the statement that this might ensue at any time, greatly to his confusion, when walking in the streets. Dr. Mackenzie thought that this symptom might be ocular. The vision was normal, save for a low degree (— 0·50) of myopia. On further examination both pupils reacted sluggishly to light, but freely to accommodation. Again, exophoria was found to be present, amounting to 5°. This anomaly it was which probably accounted for his giddiness, and it suggested as well the possible nature of the true diagnosis. The knee jerks were impaired, that on the right being nearly absent. Then the patient admitted to having gastric pains every morning, which he regarded as due to dyspepsia. These pains always passed off after he had taken a cold bath. It is interesting to note that according to Dr. Mott, the constant and earliest sign present in all cases of commencing tabes is the loss of the infra-scapular reflex. This was found by Dr. Shaw-Mackenzie to be absent in his patient.

Hospital Notes.

By A. Elliot, M.D.

A Series of Cases illustrating the Difficulty in certain instances of Distinguishing between Acute Thoracic and Abdominal Disease.

Case 1.—Edwin S., aged 9, a schoolboy, was admitted to hospital on January 25, 1904, complaining of abdominal pain. Two days previously he had fallen in the street (slipped on a frosty road) but did not appear to have injured himself in any way. He was able to walk home and remained quite well till the following evening, when he complained of severe abdominal pain. There was no sickness and the bowels acted naturally on the day of admission. There were no urinary symptoms.

The personal and family history showed nothing of special note.

On admission, the boy was collapsed and looked extremely ill. Temperature 101°, pulse 90, respiration 52 per minute. The face was somewhat dusky and had the pinched appearance of acute abdominal disease. The tongue was furred and dry. Decubitus dorsal, with knees drawn up. The abdomen was markedly retracted and immobile. It was superficially tender but deep palpation was well borne. The boy complained of severe pain referred to the umbilical region. The respirations were extremely shallow, a condition which appeared to be due to the abdominal pain. The lungs were examined by three independent observers and no signs of disease detected. The heart sounds were feeble but natural. Pain in the legs was complained of, but no objective signs in bone or joint was found.

The patient was seen by a physician and surgeon in consultation, but no definite diagnosis was arrived at. The question of pulmonary disease was discussed and seemed, in spite of the absence of physical signs, and especially in the light of the altered pulse-respiration ratio, to be a likely possibility. Further, the abdominal condition did not seem to call for immediate operation, and it was decided to observe the case for a few hours. The same evening the peculiar grunting expiration of early pneumonia was noted, and by the next afternoon there was distinct evidence of consolidation at the left base. On the 27th the right base became affected, the heart dilated rapidly and an apical systolic murmur developed. On February 5 the right lung showed signs of resolving, but there was no improvement in the

patient's general condition. Next day pericardial friction was heard, which spread rapidly over the whole of the precardium, and the patient died on February 10.

Post-mortem examination showed consolidation of both lower lobes, recent sero-fibrinous pericarditis, with fresh vegetations on the central cusps.

CASE 2.—Arthur F., aged 33, was admitted to hospital at 9 p.m., on February 3, 1905. On the previous day he had suffered from diarrhœa, but without abdominal discomfort. The afternoon of the 3rd he had spent at a football match, and on the way home, about 8 o'clock in the evening, had been seized with violent pain in the upper abdomen, and had vomited. He had had no food since the early morning. On admission, the temperature was 98·8°, the pulse 118 and the respirations 40 per minute. The abdomen was rigid and tender, and did not move on respiration. No definite tumour could be felt, and the liver dulness was not diminished. From the severity of the abdominal symptoms the case was considered to be one of ruptured duodenal ulcer, and laparotomy was performed at midnight. On opening the abdomen no evidence of disease in the stomach or duodenum was found, and the appendix was ascertained to be healthy. The pain gradually lessened and by the third day had entirely ceased. The abdominal wound healed without trouble.

At the time of admission no evidence of chest disease was noted, but some days later there were "coarse dry sounds" over the front of the right chest, with some impairment of percussion at the apex. These gradually cleared up with exception of the right anterior apex, which showed signs of quiescent tuberculous disease. Tubercle bacilli were found in the sputum "in very small numbers." The case appears to have been one of right-sided pleurisy, occurring in a tuberculous subject, with epigastric pain referred to the termination of the intercostal nerves.

CASE 3.—Daisy M., aged 6, was admitted to hospital on February 8, 1905, as a case of appendicitis requiring immediate operation. Her illness had begun five days previously with abdominal pain, vomiting, and diarrhœa. These symptoms lasted for twenty-four hours, after which the diarrhœa and vomiting ceased, but the abdominal pain persisted and cough began. Nothing abnormal had been noticed in the stools. The child was stated to have been "feverish at night."

A year previously the patient had been in another hospital, suffering from some head affection. She had been subject to attacks of bronchitis, and had had measles as an infant.

Beyond a history of rheumatism in both parents, there was nothing of special note in the family history.

On admission the temperature was 103·8°, the pulse 148, and the respirations 60 per minute. The abdomen was tender all over, but moved fairly well, and without special or localised pain or tenderness. The left base was dull to percussion, with diminished breath sounds and vocal resonance. Two days later bronchial breathing was found on the left base in addition to the dulness, the heart was slightly displaced to the right, and the needle of an exploring syringe introduced below the angle of the scapula withdrew turbid fluid. On February 19 a portion of rib was excised and pus evacuated. The temperature gradually fell to normal, and the patient was discharged well on April 15.

On admission to hospital it was possible to distinguish the condition as one due to thoracic and not to abdominal disease, but the case is interesting as showing that delay in the appearance of chest signs in a case whose symptoms are in the early stages entirely abdominal may lead to an erroneous diagnosis of peritoneal inflammation.

Case 4.—Albert C., aged 21, carman, was admitted to hospital on April 28, 1904, with a diagnosis of ptomaine poisoning. On the evening of the 25th he had eaten a quantity of meat which was of doubtful nature. Next morning he was seized with severe abdominal pain referred especially to the epigastrium. He felt sick, but did not vomit. The pain continued on the following day, and he was unable to go to work. The urine was diminished in quantity, but showed no obvious naked-eye alteration in character. There was no diarrhœa, the bowels being opened once each day. On the day of admission he had been sick once, and the pain was more severe. There had been no cough.

The family history showed nothing of importance. The patient had had no severe illnesses, but confessed to excessive indulgence in alcohol.

On admission the temperature was 101°, the pulse 96 per minute, and the respirations 24. The patient was in a nervous, excited condition, and complained greatly of pain in the epigastrium and all over the left side of the abdomen. There was distinct epigastric hyperæsthesia, the abdomen moved but slightly, the rigidity and immobility being most marked on the whole of the left side. There was some tenderness on deep palpation, but this was nowhere very marked. The liver was not enlarged, the spleen could not be felt, and there were no enteric spots. The chest moved equally well on both sides. In front the percussion note was quite natural, but at the left base behind there was distinct impairment, with a patch of bronchial breathing. The heart showed no evidence of disease

By the next evening the temperature had risen to 104°, and the whole of the left lower lobe was consolidated. There were no further abdominal symptoms; the temperature fell to normal by crisis during the night of the 30th, and the patient was discharged well a fortnight later. This case would appear to be an exact parallel of that previously detailed (No. 1).

Case 5.—Henry M., aged 26, footman, was admitted to hospital on October 9, 1905, complaining of abdominal pain. On September 28, twelve days before admission, he had been seized, one hour after a heavy meal, with severe pain in the upper abdomen and vomited, the vomitus consisting of altered food only. During the night he vomited several times, small quantities of watery fluid free from blood being ejected on each occasion. Next day he remained in bed, the pain being severe, but the sickness much less frequent, and on the following day (September 30) he attended a general hospital as an out-patient. It was not considered necessary to admit him and he was given medicine, after which the sickness ceased and the pain lessened somewhat. Two days later the pain became more severe and the sickness returned. He was treated at home by his own doctor and improved considerably, but remained in bed. There was no further vomiting, but the pain never quite disappeared. On October 8, the day before admission, the pain and vomiting returned; his doctor considered that he had grave abdominal mischief and recommended his admission to the West London Hospital. The bowels had acted more or less regularly all through the illness, and nothing abnormal had been noted in the stools.

For some two years or more he had been subject to "indigestion," characterised by pain coming on never less than an hour after eating, but unaccompanied by vomiting. On three or four occasions he had noticed melæna after a specially severe attack, for which he had been accustomed to take an aperient. He gave no history of any other illness.

On admission he was distinctly anæmic, but showed no facial evidence of acute abdominal disease. His temperature was 97·4° (rising the following day to 100°, and thereafter remaining at or about the normal line), pulse 88 and respirations 24 per minute.

The abdomen was not distended and moved well in the lower half. The upper half, especially the right quadrant, was resistent, and moved imperfectly on respiration. This area, extending for about three inches below the costal margin, was dull to percussion, slightly prominent, and so tender to touch that palpation could not be satisfactorily carried out. Next day the pain was less severe and the

tenderness had decreased so much that a definite edge could be palpated, convex downwards, at the lower margin of the dull area. The base of the right chest posteriorly was dull to percussion almost as high as the scapular angle, with much diminished breath sounds and almost absent vocal fremitus. During the two following days the pulse and temperature remained normal. The patient was free from pain except on movement, but the tenderness and prominence in the right hypochondrium, together with the well-defined lower edge, persisted. The physical signs in abdomen and chest, together with a previous history of epigastric pain and melæna, seemed to indicate the presence of a subphrenic effusion due probably to a leaking duodenal ulcer, and laparatomy was performed on October 13. The hypochondriac tumour was found to be due to a Riedel's hepatic lobe, on the upper surface of which there were several puckered cicatrices suggestive of old, possibly syphilitic, inflammation. The gall bladder and ducts were healthy. The duodenum showed evidence of old inflammation, and there were short bands of adhesion extending from it to the under surface of the liver. There was no sign of perforation and no ulcer was found. The stomach on examination was natural The adhesions were broken down and the abdominal wound closed. The after history was uneventful. There was no pain from the time of the operation, the wound healed well and the chest signs rapidly cleared up. Patient was discharged well on November 7. This case is one of the most instructive of the series. The physical signs on admission, especially in the light of the previous history, seemed to warrant a diagnosis of ruptured duodenal ulcer. On the other hand, the chest signs, together with the normal pulse, temperature and respiration were more in accord with a basic pleurisy in the stage of effusion, and it seems now probable that the latter and not the former condition was the real *fons et origo mali*, and that the endo- and peri- duodenal inflammation was at the time quiescent and not the direct cause of the symptoms.

Case 6.—Mrs. R. F., aged 27, was admitted to hospital on October 17, 1905, as a case of "serious abdominal trouble which may possibly require operative treatment." For a week she had complained of "stomach ache," and on the 15th had been seized with severe abdominal pain which spread upwards from the pubic region. It had come on after a meal and had been followed by sickness. Next day the pain lessened for a short time, but returned as severely as before and persisted till admission. There had been dysuria for some days, and for over twelve hours sickness had been constant. The bowels had acted daily, but not freely.

The patient had had pneumonia on the right side sixteen months before admission, but no other illness of importance. She had four children, the youngest 5½ months old. Menstruation had always been irregular; catamenia present on admission. There was a history of "indigestion" for some years.

On admission the patient looked extremely ill; the temperature was 100°, pulse 96, respirations 32 per minute. She complained of pain on respiration, and lay on her back with the knees drawn up. The tongue was furred and dry. The abdomen was distended and moved imperfectly on respiration, the slight movement present being symmetrical. It was resonant everywhere, except in the flanks, where fixed dulness was noted. There was general tenderness, but no great rigidity. No tumour could be felt. Rectal examination was negative. The absence of "abdominal facies" is specially noted. Vomiting was frequent. Examination of the chest showed impaired resonance, diminished voice sounds and vocal resonance, with fine friction at the right base. There was some tenderness to palpation over the right lower ribs.

After consultation it was decided to postpone operation, at least for the present, and to observe the progress of the case.

Next day there was less pain and less distension, and by the 18th the patient expressed herself as "comfortable." On the 23rd the abdomen was soft and painless. The sickness had ceased, but slight jaundice was noted. There was still a cough, and friction sounds could still be heard over the right base. On the 27th, when more exhaustive examination was possible owing to the patient's improved condition, in addition to the basic pleurisy, signs of probable tuberculous disease were found in the upper and middle lobes of the right lung, and in the lower lobe of the left.

The further progress of the case, beyond slight return of abdominal pain on one or two occasions, calls for no special comment, and the patient was discharged to a convalescent home on November 10.

The symptoms and physical signs presented by this case on admission were extremely suggestive of urgent abdominal trouble, and, but for the presence of the basic pleurisy, the treatment would in all probability have been in that direction. Subsequent events showed, however, that the pleura rather than the peritoneum was the seat of the inflammatory mischief.

CASE 7.—Gertrude S., aged 34, single, a domestic servant, was admitted to hospital on June 27, 1905. A few hours

earlier she had been seized with pain in the epigastrium. The onset was quite sudden, about three hours after dinner, and the pain was so intense that she had to lie down at once. She had vomited once, soon after the occurrence of the pain. She was recommended by her doctor to come into hospital without delay.

For some six months she had suffered from similar but much less severe attacks of pain after food, and for five years had had more or less "indigestion." The pain came on immediately after eating, or during the course of a meal; sickness had been frequent, and vomiting always relieved the pain. The vomitus had been "like coffee-grounds" on many occasions, but no melæna had been noted.

On admission the temperature was 99·4°, the pulse 144, and the respirations 28 per minute. The patient was evidently in great pain, and kept her knees drawn up. The abdomen was not distended and moved fairly well on respiration, but on palpation was found to be hard and resistant all over. The liver dulness was unaltered. The pain was not referred to any particular part of the abdomen, but seemed to be more or less general. Soon after admission a quantity of brownish liquid was vomited, and thereafter the pain was considerably eased. Ruptured gastric ulcer was considered to be the best explanation of the symptoms and physical signs, but a surgeon who saw the case the same evening did not consider that the conditions were sufficient to warrant immediate operation.

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On the following day the temperature rose to 102° and the abdomen began to distend. Twenty-four hours later the liver dulness was distinctly diminished and signs of pleurisy were detected at the right posterior base. There was now marked tenderness and resistence over the right hypochondriac region. The patient was taken to the theatre prepared for operation, but after careful examination was sent back to the ward, surgical measures not being considered justifiable. During the next few days the abdominal condition remained unchanged but the chest signs increased, and on July 6 evidence of fluid in the right pleura was noted. The case was now definitely diagnosed as one of primary pleurisy. Gradual improvement followed, and the temperature reached the normal line for the first time on the morning of July 14, remaining, however, at or above 99° in the evening during the remainder of the patient's stay in hospital. She was discharged on July 30.

On November 7 she was readmitted. She stated that she had remained well for two months after leaving the hospital, but for four or five weeks before readmission had suffered

from pain after food and had vomited after every meal. The pain was always in the " pit of the stomach " and was accompanied by a burning sensation felt through to the right side of the spine. This had steadily increased, and for a fortnight had been very severe. In addition she complained of a dull, continuous pain referred to the lower abdomen.

On admission, the patient looked very ill and was markedly anæmic. She had evidently lost weight to a considerable extent—she thought about two stones—and could eat nothing without suffering from immediate pain and vomiting. For the first time she had noticed melæna the day before admission. There was marked resistance and tenderness in the epigastrium, extending more to the right than to the left of the middle line. No tumour could be felt. The abdomen was opened on November 13. The lesser curvature of the stomach, especially at the pyloric end, was found to be firmly adherent to the lower surface of the liver, the adhesions indicating inflammatory action at no very distant date. The stomach was so fixed that posterior gastro-jejunostomy was performed with some difficulty. The further history of the case calls for no special comment. The wound healed rapidly and patient was discharged on December 14. She was then quite free from pain and was able to eat the ordinary hospital diet without inconvenience.

This case may be compared and contrasted with that of Henry M. (Case No. 5). The differential diagnosis in the early stages was extremely difficult—perhaps impossible—and many different and conflicting opinions were expressed as to the true pathology. The patient was twice prepared for operation, but on both occasions the surgeon held his hand. In the light of the condition found at the operation in November, it would appear that the diagnosis of primary pleurisy was erroneous, and that rupture of a gastric ulcer actually occurred on June 27. In all probability the stomach was already adherent to the liver, and the presence of this condition prevented the extravasation of the gastric contents into the general peritoneal cavity, and thus marked to a certain extent the true nature of the condition. The pleuritic effusion was doubtless secondary to the gastric leak and not the primary affection.

Reviews and Notices of Books.

FAULDER WHITE ON THE RATIONAL TREATMENT OF RUNNING EARS.[1]

THIS little book is a brief record of the author's views on the proper method of treating cases of chronic middle ear suppuration, and of his experience in the treatment of these cases. He is of opinion that many cases can be cured by careful and thorough irrigation which are not benefited by the methods commonly employed. He insists on the necessity of enlarging small perforations in the drum membrane, and in a certain number of obstinate cases he advocates extraction of the malleus and incus. For irrigation of the middle ear he employs a Higginson's syringe and a hot solution of silico-fluoride of potassium, and passes about a quart of the solution through the ear four times a day. We believe that the author has made out a good case for more thorough methods of irrigation than are commonly employed, and although we have had no experience with silico-fluoride of potassium solutions, we think it possible that they possess some of the advantages which he claims for them. On the propriety of enlarging small perforations in many cases of chronic otorrhœa there can be no difference of opinion. The efficacy of ossiculectomy, or, as the author prefers to call, "otectomy" in certain cases, has long been recognised, although this and other intrameatal operative procedures, which Mr. Faulder White advocates, are by no means as wholly free from danger as he contends. When, however, Mr. White goes on to discuss the radical operation, its scope and its efficacy, we are in disagreement with almost every word he says. Any one who has performed any considerable number of radical operations must have come across many cases in which the conditions were such that no amount of irrigation, with or without removal of ossicles, could conceivably have effected a cure. The operation has not a "considerable mortality," nor, indeed, any appreciable mortality at all, so far as the operation itself is concerned. When it is done, as it always is, preparatory to exploring the cranial cavity in intracranial complications of otitic origin, there is, of course, a considerable mortality, but this is not due to the radical operation. The radical operation effects a cure of a chronic otorrhœa, which, in completeness and permanency, surpasses, and must necessarily surpass, that which can be brought about by any intrameatal operation. It is not true that the effects are often disastrous to the hearing. We fail to see why the hearing should be any worse after the radical operation than after otectomy, and experience shows that it is not. The radical operation, as at present performed, is the greatest advance which modern otology can boast of. If Mr. White had contented himself with asserting that the operation is sometimes performed without giving a fair trial to more conservative methods we should, perhaps, not have been inclined to wholly disagree with him.

[1] "The Rational Treatment of Running Ears." By F. Faulder White, F.R.C.S. Iliffe and Sons. London: 1905. Pp. 35. Price 5s.

HERSCHELL ON ELECTRICAL METHODS IN AFFECTIONS OF THE STOMACH.[1]

To those who are interested in the application of electricity to medical purposes this book may prove useful, for it is written in a sufficiently elementary manner to enable a medical man without an expert knowledge of electrical methods to treat the commoner disorders of the digestive system with some idea of what he is doing and what results he may expect therefrom. The author presupposes a knowledge of the elementary facts of electricity and of the simpler kinds of apparatus, and then taking the commoner digestive disorders one by one, points out, in a clear and concise manner, how these may be treated, either by means of galvanic and faradic currents, or by the use of sinusoidal currents or high-frequency apparatus. We are pleased to see that he does not over-state the value of currents of high potential and frequency. We welcome this book, as it is written in a modest manner, not claiming, as do so many experts in electricity, that these methods will cure any and every case of disease of the stomach. At the same time it cannot be doubted that electrical treatment is of the greatest use in many stomachic disorders, more especially of the functional type, and if a perusal of this volume will stimulate medical men to treat a few of their chronic gastric cases by these methods, instead of allowing them to drift to the so-called "medical electrician," he will not only secure considerable knowledge and kudos for himself, but will be the means of helping to raise electrical treatment to a better position than it at present occupies, which it undoubtedly deserves.

KLOPSTOCK AND KOWARSKY'S MANUAL OF CLINICAL CHEMISTRY, MICROSCOPY AND BACTERIOLOGY.[2]

THEW WRIGHT'S translation of Klopstock and Kowarsky's abstract of v. Jaksch's clinical diagnosis, will be found of considerable use to the student who is taking a course under a competent teacher, or who wishes to refresh his memory.

Considering the size of the book the amount of information it contains is very great; it errs, however, by omitting essential detail in describing methods. We will only quote a single instance: in preparing a blood film, after directions for staining and washing, it mentions nothing more, and leaves to the knowledge of the reader as to whether it should be dried in air, warmed or blotted.

In our opinion editorial notes should be added by any translator, for it seems absurd at the present day to read Jenner's well-known stain described under the name of May and Grünvald. Leishmann's valuable modification is not mentioned.

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[1] "Electrical Methods in the Treatment of Affections of the Stomach and Intestines." By George Herschell, M.D.Lond. London: A. Siegle. 1905. Pp. 108.

[2] "A Manual of Clinical Chemistry, Microscopy and Bacteriology." By Dr. W. Klopstock and Dr. A. Kowarsky. Translated by Thew Wright, M.D. London: Rebman, Ltd., 1905.

The translator shows a want of courage in turning German into American, and leaves the term "Klatsch-preparata" unaltered. We doubt whether many practitioners, for whom the book is specially written, would recognise "contact preparations" or "impression preparation of plate cultures" under that name.

The diagrams in the text are exceedingly well chosen, whilst the majority of the coloured plates at the end are good, but a very incorrect idea of the beauty of Romanowski's stain of malarial parasites would be obtained from the execution of plate xiv. The absence of an index detracts from the value of the book, and we trust that in future editions many of these defects will be remedied.

RAWLING ON LANDMARKS AND SURFACE-MARKINGS OF THE HUMAN BODY.[1]

THAT a second edition of this little handbook should have been called for a year after the appearance of the first shows clearly that the praise which was primarily awarded to it was fully justified. In this edition minor errors have been rectified, twenty pages of text have been added, and one or two new figures introduced, and several of the illustrations modified with decided advantage. The periods at which the centres of ossification of the various bones, together with the time at which the several epiphyses unite, have been well-arranged in a table at the end of the volume. On page 59 there is the not uncommon misprint of "ileo-pelvic" for "ilio-pelvic," and curiously the same occurs in the description of fig. xviii., although immediately above the spelling of "iliac colon" is correctly given. This second edition is certain to be as equally favourably received as was the first.

THE SECOND AND FOURTH LEES AND RAPER MEMORIAL LECTURES.[2]

THE present interest taken by so large a section of the medical profession in the question of the action of alcohol upon the tissues of the human body, makes the reprinting of the second and fourth of the Lees and Raper Memorial Lectures very opportune. The second Lecture was delivered by Sir Victor Horsley before a crowded audience in 1900. It deals very clearly, scientifically and dispassionately with the effects of alcohol upon the human brain, indicating succinctly the recent researches into the matter by such well-known observers as Mott, Waller, Mommsen, Kræpelin, Ridge, and others. The Lecture is illustrated with twenty-six most beautiful photographic reproductions. The fourth Lecture was delivered by Professor Sims Woodhead, M.D., at Cambridge, on the subject of the recent re-

[1] "Landmarks and Surface-Markings of the Human Body." By L. B. Rawling, M.B., B.C.Cantab., F.R.C.S.Eng., Assistant Surgeon, Senior Demonstrator of Anatomy, and Demonstrator of Practical Surgery St. Bartholomew's Hospital. Second Edition. Pp. 96; figs. 31. London: H. K. Lewis, 1905.

[2] "The Lees and Raper Memorial Lectures." Published by the Lees and Raper Memorial Trustees, 20, Tothill Street, S.W.

searches on the Action of Alcohol in Health and in Sickness, and the matter there put forward is well worthy the consideration of all practitioners who have the welfare of the community in their hands. The relationship of alcohol to the specific fevers and to immunity is very thoroughly explained, and the food value of alcohol is adequately discussed.

TURBAN ON THE DIAGNOSIS OF TUBERCULOSIS OF THE LUNG.[1]

DR. TURBAN'S treatise quickly gained a considerable reputation in the original German, and it is pleasant to realise that in its English version it is certain to obtain a wide circulation. Dr. Morland has executed his difficult duty with great clearness and conciseness, while retaining the original character in an unusual degree. He has succeeded in the task of producing the treatise in excellent English, which, at the same time, preserves so much of the originality and peculiarity of Dr. Turban's style, as never to allow us to forget the personality of the author. It is worth noticing that the book as now published contains only the first part of Turban's treatise; the remaining portions, which Dr. Morland has wisely discarded, consist of detailed statistics and accounts of the treatment adopted at Turban's sanatorium, and the results obtained thereby.

Turban's views on the early diagnosis of pulmonary tuberculosis are probably well-known. In opposition to many distinguished authorities, especially of an older generation, he holds that the diagnosis can and should be made in spite of the absence of the tubercle bacillus from the sputum, holding that the appearance of bacilli in the sputum is in reality the sign of the softening and destruction of the primary lesions of the disease. In order to be able to detect the earliest signs of disease Turban first lays down that a minute and detailed examination of the patient is necessary, an examination which cannot possibly be conducted efficiently in a less time than half-an-hour, and may take longer. The earliest signs he believes to be a roughening and a weakening of the vesicular breathing, and a lagging behind (nachschleffen) of the affected apex in inspiration. These two signs he considers sufficient to authorise the diagnosis of tuberculosis, and in the third section of the present volume he describes in detail the peculiarities of the signs, the best mode of eliciting them, and the possible sources of error. It will be sufficient here to add that Turban is not content to base his diagnosis in these very early cases upon one examination, but desires two at least before he will pronounce a verdict. Nor does he neglect to call in to his assistance the whole of the varied methods of examination which have been described, assigning to each after discussion of their value a rank in the scale. It is of interest to note that he has a very poor opinion of the value of the auscultation of the voice sounds, and regards the claims of the Röntgen ray experts as unduly exaggerated; an opinion which will probably be shared by the majority of physicians in this country.

[1] "The Diagnosis of Tuberculosis of the Lung, with Special Reference to the Early Stages." By Dr. K. Turban. Translated by Egbert Morland M.B. Pp. 124. Price 5s. London: John Bale, Sons and Danielsson.

We recommend a close study of this book to all those who are desirous of learning the early manifestations of tuberculosis; no one can rise from it without feeling that he has derived from it something new and helpful to his knowledge of the disease. Sir Dyce Duckworth contributes a short commendatory introduction to the volume.

BARTON ON THE ADMINISTRATION OF ETHYL CHLORIDE.[1]

THIS small pamphlet contains a concise, well written, and practical description of the administration of ethyl chloride. The author very properly dwells on the risks involved in administration, especially in the hands of those who are unskilled and inexperienced, and he rightly insists that if an operation is possible under nitrous oxide then the more risky anæsthetic should not be used. We think, however, that very few anæsthetists will agree with the statement that ethyl chloride in point of safety is a long way ahead of ether; or that the anæsthetic may be pushed after all reflexes have disappeared.

We think, too, that Dr. Barton does not sufficiently impress on his readers the much greater severity of the after-effects as compared with nitrous oxide anæsthesia. Not only are the immediate after-effects much more pronounced, but it not infrequently happens that although the patient is not sick in hospital or consulting room he vomits freely on reaching home; and also that he is much troubled with malaise for some days afterwards.

HERSCHELL ON INDIGESTION.[2]

DR. HERSCHELL has written a book on functional derangements of the stomach which, as it has now passed into a third edition, evidently fulfils its purpose and meets a want, for the thoroughly practical treatises on indigestion are few and far between, and yet it is a complaint, especially in the functional form, which the medical man has to deal with almost every day of his life. The book has been almost entirely rewritten in this edition, and now gives the author's latest views on the use of the various forms of electricity in the treatment of the many symptoms arising from this complaint. There is a most instructive chapter on gastric neurasthenia which will repay perusal, and we fully agree with his opinions on the value of Weir Mitchell treatment in these cases. The author believes that the number of cases of gastric neurasthenia in which Weir Mitchell treatment pure and simple is likely to be of real service is very small, and that applied indiscriminately, as it has been by some physicians, it has done great harm, especially in those cases in which the walls of the stomach were muscularly weakened. An appendix on the preparation of food by cooking, with especial reference to its use in the treatment of stomach affections, will be found to be most useful. In

[1] "A Guide to the Administration of Ethyl Chloride." By S. A. H. Barton, M.D. Pp. 36. Price 1s. 6d. London: H. K. Lewis, 1905.

[2] "Indigestion. The Diagnosis and Treatment of Functional Derangements of the Stomach." With appendix. By George Herschell, M.D.Lond. Third Edition. Pp. 282. London: A. Seigle, 1905.

conclusion, we recommend this book more especially to the young practitioner anxious to gain knowledge of a class of case in which he has hitherto had but little experience, and in which successful treatment will bring him a large amount of distinction.

ROBERTS' THEORY AND PRACTICE OF MEDICINE.[1]

THIS well-known text book has stood the test of time. It now appears as a Tenth Edition, which is thoroughly abreast of medical knowledge. The work is issued in two handy volumes, a feature which at once commends itself to the reader, when one thinks of the cumbersome tomes of other similar works. The first volume is devoted to the study of pathological problems, to fevers, and to diseases of the thoracic organs.

The field of modern pathology is now so extensive, that obviously only those authors who have attempted to condense our present-day knowledge into a comparatively small space and yet leave nothing of importance omitted, can appreciate the difficulties which Dr. Roberts has overcome in the opening chapters.

Again, in the section on specific fevers, all modern information on the subject of oriental diseases, a subject of which we were more or less ignorant two decades ago, is replete with excellent descriptions of such maladies as blackwater fever, of Malta fever, and of beri-beri.

The account of the diseases of the lungs and of the heart and blood vessels are all equally good. We should prefer to see aneurysm so spelt, and not as the author spells it. This, however, is a minor detail.

In Vol. II. diseases of the abdomen and of the organs contained therein, and also of the nervous system, are exhaustively discussed. All the chapters afford excellent reading. We are especially glad to find Dr. Roberts casting doubts on the embolic theory of chorea, and describing chorea, as proved by Poynton and Paine, as a disease due to the toxin of rheumatism. Then, again, the chapter on aphasia is admirably compiled and clearly written. But we think that some simple diagrams might have made the descriptions of the different forms of aphasia more easily understood by the student. The chief, or indeed the only point in the work which we have to cavil at, is the want of simple diagrams, especially in the section on nervous diseases. Some outline diagrams showing the superficial origins of the cranial nerves, of the bulbar nuclei and the like, would greatly assist the student as he peruses these chapters. He can refer to the diagrams of pus cells in urine, or of uric acid, in his text-books on physiology, and these may be omitted in a work on medicine. But the student looks to his clinical teachers to illustrate symptoms of nervous diseases, a subject admittedly difficult to understand and digest, by some original, if outline, diagrams; and these do not seem to be forthcoming in many English text-books on medicine.

These are only small defects in an otherwise excellent work. Roberts' Practice of Medicine should be on the library shelf of every busy practitioner, as well as in the possession of every industrious student.

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[1] "A Handbook of the Theory and Practice of Medicine." Tenth Edition. By Frederick T. Roberts, M.D., F.R.C.S. London: H. K. Lewis, 1905.

THE LIBRARY REPORT.

ANOTHER exhibition of recently published works was given at the last meeting of the Society, and, as before, attracted a good deal of attention. These books were on view in order to show that the Library is being kept well up to date through the arrangement with Messrs. Lewis, and furthermore to prove to the members of the Society the evident advantage of a subscription to the Library. Two good volumes have recently been purchased which will prove an acquisition, namely, Rolleston's "Diseases of the Liver," and Jaksch and Garrod's "Clinical Diagnosis"; and further purchases will be made very shortly.

To attract authors to advertise in the Journal, special consideration is now being given to secure the ablest expert criticism, and members are urged to represent to their medical friends who are authors this fact, and that a notice of their books in a journal having a circulation of a thousand copies among an influential class of medical men is a good business transaction and worth consideration.

The last edition of Martindale's "Pharmacopœia," and Cheyne and Burgard, vol. vi. (part 1), are missing from the Library: if therefore any member may have borrowed either of these, he is requested to kindly return it, or acquaint the Librarian of its whereabouts.

HERBERT W. CHAMBERS,
December, 1905. *Hon. Librarian.*

LIST OF BOOKS RECEIVED.

A Manual of Clinical Chemistry, Microscopy and Bacteriology. By Dr. M. Klopstock and Dr. A. Kowarsky, of Berlin. Translated by Thew Wright, M.D.

The Animal Parasites of Man. By Dr. Max Braun. Translated by Pauline Falcke.

The Rational Treatment of Running Ears. By F. Faulder White, F.R.C.S.

Indigestion. The Diagnosis and Treatment of the Functional Derangements of the Stomach. By George Herschell, M.D.Lond.

Electrical Methods in the Treatment of Affections of the Stomach and Intestines. By George Herschell, M.D. Lond.

Landmarks and Surface Markings of the Human Body. Second Edition. By L. B. Rawling, M.B., F.R.C.S.

The Lees and Raper Memorial Lectures.
The Diagnosis of Tuberculosis of the Lung. By Dr. K. Turban. Translated by Egbert Morland, M.B.
A Guide to the Administration of Ethyl Chloride. By S. A. H. Barton, M.D.
A Handbook to the Theory and Practice of Medicine. By Frederick T. Roberts, M.D., F.R.C.P.

POST-GRADUATE COLLEGE.

BY THE DEAN.

THE First Winter Session commenced on Wednesday, October 11, the opening address being delivered by the President of the Royal College of Surgeons, about 100 past and present members of the Staff, Residents, Post-Graduates and others being present. The Session has been a most successful one, 96 medical men having attended the College. Amongst these were 20 officers of the Naval Medical Service, 5 of the Royal Army Medical Corps, 7 of the Indian Medical Service and 21 from the Colonies and abroad. The number of Life Members is now 69.

During the Session several special classes have been held in the following subjects: Ophthalmology, Practical Administration of Anæsthetics, Tutorial Class in Medicine, Examination of Throat, Nose and Ear, Intestinal Anastomoses, Skiagraphy, Bacteriology, Clinical Examination of Blood and Urine, Operative Surgery on the dead body, Surface Anatomy and Gynæcology.

We regret to record the death of William Hooper Masters, M.D., of 64, Castlenau, Barnes, who was a Life Member of the College.

The Second Winter Session commences on Monday, January 8, 1906.

The arrangements which have been made for the holding of classes in operative surgery on the dead body have been completed, and two such courses have been held this Session.

The following changes have been made in the teaching staff: Dr. J. Candler having resigned the post of pathologist to the Hospital, Dr. Hamilton Wright was appointed in his place, and has taken up the teaching of bacteriology and pathology in the College.

Dr. Arthur, who had been appointed as second medical officer in charge of the X-ray department, has held a series of classes in X-ray work, in addition to those held by Dr.

Chisholm Williams. Mr. L. Lloyd has been appointed sole Lecturer on Anæsthetics, and the special classes in Anæsthetics are held by Dr. Shuter.

The following is a list of Post-Graduates who have attended the Practice of the West London Hospital for the past three months. An asterisk is placed against the names of those who are Life Members:—

A. Anderson (Sydney).
*L. H. Armstrong (Ripon).
*D. Arthur (Ealing).
*G. J. Bagram (Bayswater).
*A. Baldock (Earl's Court).
Chas. Barlow (Poplar).
*W. E. Barton (Streatham).
*A. G. Beale (Kensal Rise).
*Dep.-Ins. Gen. R. Bentham, R.N.
Lt.-Col. E. Bovill, I.M.S.
F. Bowe (Timaru).
R. C. Bright (Bristol).
*R. D. Brinton (S. Kensington).
F. Carden Brodie (Sandown, I.W.).
*H. F. Browne (Langham Street).
F. C. Bryan (Bayswater).
*W. M. Burgess (Harlesden).
Ewen Cameron (Bedford Park).
*Capt. Carmody, R.A.M.C.
*Major E. R. W. Carroll, I.M.S.
H. W. Chambers (Hon. Member) (Shepherd's Bush).
Surgeon-General W. S. Charlton, A.M.S.
*Col. Clutterbuck (Bayswater).
James Cook (Queensland).
Martin A. Cooke (Ealing).
*E. J. Coulson (Fulham).
Fleet-Surgeon J. E. Coad, R.N.
Major G. S. Crawford, R.A.M.C.
H. G. Critchley (Pimlico).
H. Evelyn Crook (Twickenham).
H. V. Crossfield (Sydney).
*J. S. Curgenven (Bayswater).
S. V. Daly (Cork).
Surgeon A. La Touche Darley, R.N.
J. H. Dauber (Mayfair).
G. G. Davidson (West Kensington).
F. S. Dawe (Chiswick).
E. C. Dean (W. Australia).
*L. Dobson (Kensington).
W. Barclay Dick (West Ealing).
J. H. Ebell (Ceylon).
F. H. Eastwood (Ballarat).
G. W. Emlyn (Bayswater).
*A. St. Aubyn Farrer (Paddington).
J. N. F. Fergusson (Malvern).
*W. H. Fitzmaurice (Dunmanway).
*Fleet-Surgeon A. M. French, R.N.
Frank Forrest (London).
W. E. Fry (Hammersmith).
*M. N. Gandevia (Ceylon).
*F. Gans (West Kensington).
*H. M. Gay (Southampton).
*D. Gault (New Zealand).
A. H. Gerrard (Chiswick).
W. H. Gillatt (Row, N.B.).
G. Greene (Lewes).
*A. J. Grant (West Kensington).
*W. Grantham-Hill (Chiswick).
J. K. Grimmer (Hounslow).
D. Gwynne-Hughes (Sydney).
*C. H. Haines (Kensington).
A. R. Hall (Kensington).
G. A. S. Hamilton (Southsea).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
*A. Harrison (Yeovil).
H. F. Harvey (Perth, W.A.)
*N. Heard (Kensington).
E. W. Hedley (Westminster).
T. S. Hodson (Bitterne).
Guy Hollings (Euston).
H. S. Hutchison (Glasgow).
Staff-Surgeon W. Jackson, R.N.
Major J. C. Jameson, R.A.M.C.
*W. C. James (Kensington).
Staff-Surgeon T. T. Jeans, R.N.
*Capt. Johnson, R.A.M.C.
Major J. G. Jordan, I.M.S.
J. W. Kennedy (Australia).
T. S. Kerr (Singapore).
Fleet-Surgeon Anthony Kidd, R.N.
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (West Kensington).
H. Kirwan King (Nowra, N.S.W.).
*Alex. Krakowski (West Kensington).
B. Lane (Limavady).
Capt. Lapsley, I.M.S.
John Leask (Singapore).
C. A. Lees (West Ealing).
H. E. Lee (Sydney).
*T. M. Legge (Temple).
Capt. L'Estrange, R.A.M.C.
Lewis Lewis (Brondesbury).
*T. Ligertwood (Chelsea).
Capt. C. H. S. Lincoln, I.M.S.
A. G. Little (Valdosta, U.S.A.).
Staff-Surgeon F. D. Lumley, R.N.
*J. Lynes (Kensington).

*A. B. Lyon (Hammersmith).
*Norman Macdonald (Harlesden).
J. Macdonnell (Roscommon).
*E. D. Macdougal (Walton-on-Thames).
E. C. Macdowel (Sligo).
J. W. McEwen (Detroit, U.S.A.)
*J. B. Mackay (Newport, I.W.).
R. McLelland (West Hampstead).
Surgeon F. J. McKenna, R.N.
*H. McNickle (Vauxhall).
*G. Maguire (Kew).
*D. F. Maunsell (South Kensington).
Staff-Surgeon E. T. Meagher, R.N.
H. T. N. Merrick (W. Kensington).
Major G. T. Mould, I.M.S.
*B. W. Mudd (Storrington).
J. C. Muir (Fulham).
W. C. C. Muir (Melbourne).
W. A. Murray (Sierra Leone).
Thos. Myles (Wigton).
*W. Nolan (Bayswater).
*W. Norbury (London).
*W. R. Olver (New South Wales).
*H. M. Page (Kensington).
H. Compton Parsons (Devon).
W. Harland Peake (Hampstead).
*A. F. Penny (Chelsea).
Farquhar Philip (West Ealing).
Douglas R. Pike (Kensington).
*R. D. Pollock (Acton).
Lt.-Col. W. A. Quayle, I.M.S.
E. B. Reckitt (Boston).
*A. Renny (Southampton).
*A. H. Rideal (Twickenham).
*Patrick Robertson (Canada).
*A. Tait Robinson (Portman Square).
*Neil Robson (Sittingbourne).
*F. E. Rock (Hammersmith).
*T. Mackay Ross (Fulham).
Capt. N. J. C. Rutherford, R.A.M.C.
John C. Shaw (Brentwood).
*Lt.-Col. Silcock, I.M.S.
A. Malcolm Simpson (Ayr).
*G. A. Garry Simpson (Acton).
*A. Ross Sinclair (Parson's Green).
*W. Slater (Wanstead).
Major H. Austen Smith, I.M.S.
A. E. Stevens (Chelsea).
Surgeon W. J. Stitt, R.N.
*H. H. Sturge (Maida Vale).
J. H. Suffern (Ireland).
Fleet-Surgeon J. Sugrue, R.N.
*E. Swain (Hampton Hill).
H. Tanner (Hurlingham).
P. Templeton (Woking).
C. Thackray (St. Pancras Infirmary).
F. C. Tothill (Staines).
E. F. Travers (Kensington).
*L. A. Walker (Lee-on-Solent).
Jas. Wallace (W. Acton).
R. J. Whiteman (Fulham).
*H. W. Walter (Brentford).
*J. Williamson (Putney).
C. E. A. Wilson (London).
J. H. Wolfe (Hanwell).
A. P. Woodeforde (Shepherd's Bush).
*Oswald S. Wraith (Darwen).

Miscellaneous Extracts.

RADIUM IN THE TREATMENT OF RODENT ULCER.—Darier (*Rev. de Thérap.*, September 15, 1905) reports a case of rodent ulcer, beginning in the ala of the nose, recurring after early removal, and spreading by way of the inner canthus to the lids, which continued to grow in spite of cauterisation and other therapeutic measures. He feared lest it should take on a more malignant nature and burrow deeply into the lachrymal apparatus. The patient refused to permit a second operation, so Darier decided to use radium, without much expectation of success. Five milligrams of radium sulphate were used in daily exposures of half an hour for each part of the diseased surface. In less than three weeks the growth had disappeared, leaving hardly a trace behind. When

Darier reported the case a month had passed without recurrence. He quoted another case of his own, similar in nature and result to the above, and gave a brief summary of other recently reported cases. Many of the failures may, he thinks, be ascribed to faulty methods of application, by which a large proportion of the radio-activity is wasted, as well as to the use of "impure" radium. The activity of the sample to be used can readily be tested on the operator's forearm by noting how many daily applications are needed to produce the characteristic redness.

INHALATION OF PHENYL PROPIOLATE OF SODIUM.—Bulling speaks of his experience, which now extends over a number of cases of pulmonary and laryngeal tuberculosis, of the effect of inhalations of the phenyl propiolate of sodium (*Münch. med. Woch.*, No. 8, 1905). Since his previous publication he has treated 50 fresh cases by this means, and divides them into the following classes (according to Turban) : First stage, 7 cases ; second stage, 38 cases ; and third stage, 5 cases, while 5 of the second stage showed ulcerative tuberculosis of the larynx as well as the lung disease. Three mild cases (with good prognoses from the first) were treated for six weeks, and after the end of the seventh week all the signs and symptoms of disease had disappeared, save a little prolonged expiration. Two further cases, also of the first stage, did equally well after eleven and nine weeks' treatment respectively. The remaining two cases improved very markedly after six weeks' treatment, and were discharged with the advice to continue the inhalations. The cases in the second stage were treated for from six to ten weeks. The subjective symptoms always diminished, and the appetite improved and the weight increased. Objectively, Bulling found that in some the night sweats ceased, the signs of catarrh disappeared in a few cases, and in 5 the tubercle bacilli, which had been present in the sputum, also disappeared ; but the other physical signs persisted. In 4 cases the ulceration of the larynx healed up, the speech became much clearer, and all pain was removed. In some cases the fever proved obstinate, but after some time (for example, six weeks) the temperature became normal. In the 5 cases in the third stage, only some subjective improvement was noted. The author speaks of the specific action of the phenyl propiolate of sodium. He appends the history of another case, which improved under unfavourable circumstances. The idea that the action, especially as seen in the larynx, is one of a bactericidal nature seems to the author to be probable.

PÆDIATRICS FOR THE GENERAL PRACTITIONER.—T. W. Kilmer (*Med. Record*, August 19) gives a number of suggestions intended to help the general practitioner in his management of the children who necessarily form a large proportion of his practice. In dealing with children it is essential to gain their respect, their confidence, and their obedience, and to do this tact is required. Children should not be deceived by being told that something is not going to hurt when it is, for in this way their confidence is irremediably lost. In examining an infant or young child it should always be undressed, and if asleep it should be studied awhile before being roused. A child's chest cannot be auscultated without the use of a stethoscope, because the average adult ear would cover almost an entire lung of an infant. Sputum is obtained from babies by introducing a catheter, 21 F., into the œsophagus, as the act of gagging forces the sputum which is in the œsophagus into or on the catheter. The landmarks of an infant's chest are quite different from those of an adult's, and it is impossible to locate the apex beat without the use of the stethoscope. The throat and ears should always be examined when called to a sick baby. Adenoids should never be operated on without an anæsthetic, for the nervous shock more than counterbalances the risk of the anæsthetic. A simple and practical system of milk modification that can easily be remembered is described, and a blank report is reproduced on which the mother is supposed to record the infant's progress.

THE TREATMENT OF HEPATIC CIRRHOSIS.—Schilassi (*Gazz. degli Osped.*, May 7, 1905), dealing with that class of diseases whose treatment is now almost as much surgical as medical —that is, gastric ulcer—discusses the treatment of hepatic cirrhosis. He first treats of the classification of the various kinds of cirrhosis, and takes an anatomical basis, dividing into that (1) of venous origin: (*a*) mono-venous, where the sclerosis starts from the perilobular veins, right or left lobe; (*b*) bi-venous, starting around the central veins of the lobules as well as the peripheral; (2) of arterio-venous origin; (3) biliary; (4) capsular; and (5) mixed. He then gives cases illustrating these various types. Incidentally he expresses his faith in a true malarial variety of cirrhosis, which, like some other cirrhoses, he believes starts or is originated from the spleen. The treatment of cirrhosis is dietetic (little meat, and largely milk diet), medicinal (iodides and calomel), opotherapy (thyroid, hepatic extract), and surgical. In deciding on surgical interference (Talma or modified Talma operation), one has to consider the nature of the cirrhosis (porto-splenic, porto-intestinal, porto-biliary, &c.), the state of the patient, as, for

example, hypoazoturia, glycosuria or urobilinuria, which latter may be called the "junction" of the hepatic lesion. Further, one has to consider the state of the kidney, which may be looked upon as a safety-valve in cirrhotics, and last of all the ascites. Roughly speaking, ascites may be due (1) to portal obstruction exclusively, (2) to peritonitis exclusively, (3) to a combination of the two. When a patient suffering from hepatic cirrhosis complains of wandering pains in the belly, has some rise of temperature, effusion in the right pleura, when the liver is painful on pressure after the fluid is removed, and if the fluid is rich in albuminoids great circumspection should be exercised before surgical treatment is practised. If the ascites is due to portal obstruction alone, laparotomy and a suitable form of Talma operation should be practised as early as possible. If there is any doubt as to whether the effusion may not be due to peritonitis, it is better to wait until the inflammation has become more chronic—for example, in four months' time—as early operation in these cases is liable to make matters worse by aggravating the peritonitis. As to the exact place of implantation of the omentum, the author recommends between the muscles and the peritoneum, as this is the most vascular part. In the uretero-splenomegalic cases it is better to perform an epiploo-splenopexy.

A New Method of Sterilising Catgut. — Bartlett (*Zentralbl. f. Chir.*, No. 15, 1905) describes a simple and inexpensive, and, it is held, a very effectual method of sterilising catgut. (1) The raw material is cut in lengths of about two feet, and each of these lengths is twisted round and round to form a ring, the circumference of which is about equal to that of a florin. Several of these rings are strung like pearls on one or more lengths of cotton. (2) Each row of catgut rings is subjected at first to a dry heat of 85° C. for one hour, and afterwards for another hour to a heat gradually raised to 105° C. (3) The rings are next placed in fluid paraffin and kept in this until they have become quite transparent. This change in appearance is usually effected within twelve hours. (4) The glass vessel containing the rings of transparent catgut submerged in paraffin oil is now placed on a sand-bath, and subjected to a temperature at first gradually elevated during one hour to 169° C., and afterwards kept at this point for another hour. (5) The rows of catgut rings are now very carefully transferred by sterilised forceps from the paraffin oil to a solution of 1 part of iodine crystals in 100 parts of methylated spirits, from which they can, after an interval of twenty-four hours, be removed at any time for immediate use.

REINFECTION IN HEREDITARY SYPHILIS.—Rostaine (*Thèse de Paris*, May, 1905) adopts Gaucher's division of hereditary syphilis into four classes, namely, secondary, tertiary, quaternary (parasyphilis), and quintary (dystrophies). He finds that acquired syphilis may be contracted by the subjects of quaternary and quintary hereditary syphilis in the ordinary way; that the subjects of tertiary hereditary syphilis occasionally contract acquired syphilis, but that this is unknown in the case of secondary hereditary syphilis. The duration of the immunity conferred by hereditary syphilis is not known, but is probably limited to its active state, reinfection becoming possible in proportion to the attenuation of the virus. The author points out the general belief held by the public, and also by many of the medical profession, that hereditary syphilis confers permanent immunity, and quotes a case of Tarnowsky's where a patient refused to take mercury because his father had informed him that he had had syphilis in his youth before marriage.

NOTES ON NEW PREPARATIONS, &c.

Messrs. Edward Cook and Co., London.—This firm has forwarded for our examination samples of their Toilet and Medicinal Soaps. Amongst the former we notice the "Throne" Soap, which is exceptionally agreeable to use, giving a good lather with even hard waters, and leaving no sense of irritation.

But we are more particularly interested in the "Anthrasol" Soaps for both toilet and medicinal use. These are colourless tar soaps, in which Anthrasol, which is a purified, pale yellow, limpid tar from which the pitch and colouring matter have been removed, is blended with a pure, super-creamed, milled soap, where the alkali and fat have been very carefully mixed and balanced to form an exceedingly elegant preparation.

The manufacturers state that "Anthrasol" is a mobile oil with a high capacity for penetrating the skin, and therefore more efficacious therapeutically than the ordinary tar.

We have tested these soaps and are pleased to report upon them as follows:—

"Anthrasol and Sulphur" Soap was used in cases of scabies as an adjuvant to the usual treatment, with very beneficial results.

"Anthrasol Medicinal Soap," containing 5 per cent. of the

drug, was tried in cases of seborrhœic eczema and psoriasis, without causing, and indeed relieving, irritation.

"Anthrasol Toilet Soap" and "Anthrasol and Oatmeal" Toilet Soap have been tried in ordinary domestic use and found very agreeable and efficient preparations.

Messrs. Evans, Gadd and Co., Exeter.—This firm send to us two preparations of drugs in constant use, namely, Strophanthus and Squill. These are in the form of tinctures, and their interest lies in the fact that they are both standardised by a bio-chemical method. The minimum lethal dose of the Tincture of Strophanthus for a twenty-gramme frog is a quarter of a minim, which proves it to have an effectual action upon the heart. The medicinal dose, therefore, for an adult human being is 5-15 minims of this standardised preparation.

The minimum lethal dose of the Tincture of Squill for a twenty-five-gramme frog is 3 minims, which proves it to have an effectual action upon the heart. The medicinal dose is 5-15 minims.

We consider that these two preparations are absolutely reliable owing to the great care taken in their standardisation.

The price of the Tincture of Strophanthus is 5s. 6d. per pound, and that of the Tincture of Squill is 3s. 6d. per pound.

The same firm also sends to us for examination a specimen of their "Liquor Viola Glucoside." Owing to the considerable interest that has been aroused recently by the repeated reports of benefit derived from violet leaves in treatment of inoperable cancerous conditions, we think that our readers may be interested in the account of the preparation of the Glucoside obtained from violet leaves by Messrs. Evans, Gadd, although we need scarcely state that we strongly deprecate the use of any drugs in preference to surgical procedures where these may be feasible. But so many patients ask to be allowed to try violet leaves when the surgeon has come to the end of his resources, and indeed do try them with or without the practitioner's consent, that it is interesting to know of any researches which may have been made on the subject. The following is an extract from Messrs. Evans, Gadd's work on the subject:—

"Mandelin, in 1883, found that the Violet tricolor var. arvensis contained a Glucoside having the composition and properties of Quercitrin, which he named 'Viola-quercitrin.' He obtained this Glucoside by exhausting the fresh plant with warm alcohol, removing the alcohol by distillation, and treating the residue with warm distilled water.

"He found that on boiling with dilute mineral acid the Glucoside decomposed, forming Quercetrin and a fermentable sugar.

"He also detected the presence of Salicylic Acid in minute quantities, both in the leaves of Viola tricolor var. arvensis, and those of the Viola odorata.

"In the latter case, however, the acid was only isolated after the leaves had been boiled with dilute Hydrochloric Acid.

"As it seemed probable that the Glucoside, or some product of its hydrolysis, might be the active ingredient of the leaves, a solution was prepared in the following way:—

"The fresh leaves were taken and boiled under a reflux condenser with rectified spirit for two hours. The greater portion of the spirit was then removed by distillation, and the residue evaporated until a sticky, treacle-like mass was obtained. This was treated with water, filtered, and the solution diluted sufficiently, so that one fluid part of the finished product should represent one part by weight of the fresh leaves.

"This solution reduces Fehling's solution, but more freely after being boiled with dilute Mineral Acid.

"The amount of Glucoside present was estimated in this way: the precipitated Cuprous Oxide being collected, washed with water, alcohol, and ether, ignited and weighed as Cupric Oxide.

"The result shewed the presence of 1·036 per cent. of Glucose, equal to 3·7 per cent. Glucoside, reckoned as Quercitrin.

"The solution was shaken in a separator with ether, the ether was evaporated, the residue treated with hot water, and the aqueous solution tested for Salicylic Acid, with a negative result.

"A more exhaustive and systematic examination of the leaves was next started.

"Their strong, peculiar and persistent odour suggested the presence of a volatile oil.

"On heating the fresh leaves in a still, however, no distillate was obtained under 100° C.

"A liquid having a pleasant odour distilled over at the temperature of a brine bath.

"No oil separated from this.

"Water was then added to the contents of the still, and the mixture heated over a glycerin bath.

"A distillate having an unpleasant odour resulted, but no oil separated from this.

"It was therefore concluded that the leaves, dried at a low temperature, would not suffer any loss save that of moisture.

"A quantity of leaves (about 1,000) were exposed in a hot room for four or five days, the temperature never exceeding 50° C.

"At the end of that time they were sufficiently dried to be powdered, the dried powdered product weighing 20 per cent. of the weight of the fresh leaves.

"This dry powder is a convenient form in which to keep the leaves.

"It might be administered in cachets, or a fresh infusion made from it, or the glucosidal solution described above.

"Twenty-five grammes of this powder were taken and exhausted in a Soxhlet tube with a purified petroleum spirit, boiling under 80° C.

"The spirit was removed by means of a current of air. The residue, which had the consistence of a soft extract, was equal in weight to 2½ per cent. of the weight of the dried leaves taken.

"It is of an oily nature, free from smell, lighter than water, insoluble in water, soluble in alkalies.

"Shaken with dilute acid and filtered, the filtrate gave no definite reaction with alkaloidal re-agents.

"On standing, some minute tabular crystals were seen on the sufrace of the oily mass.

"The leaves which had been thus exhausted with petroleum spirit were then treated in a Soxhlet tube with boiling alcohol (absolute) until all the colouring matter was extracted.

"The alcoholic solution gave no reaction with Fehling's solution, until it had been boiled with dilute Mineral Acid.

"The alcoholic solution was evaporated over a water bath, and the residue had a slightly granular appearance.

"It rapidly took up moisture, even when kept in a desiccator over Chloride of Calcium, and attempts to obtain crystals by evaporating, *in vacuo*, over Sulphuric Acid failed.

"The residue was then treated with water and filtered.

"The insoluble portion was shaken with dilute Sulphuric Acid and filtered.

"No indication of the presence of an alkaloid could be obtained in the filtrate.

"The aqueous solution was evaporated over a water bath, and left an intensely sweet treacle-like residue.

"No crystals could be obtained from this residue, *in vacuo*, over Sulphuric Acid.

"The exhausted marc in the Soxhlet tube consisted chiefly of fibrous matter and starch.

"From the above experiments it would seem that any activity violet leaves possess is due either to the Glucoside, the products of its decomposition, or the natural ferment associated with it.

"In the present state of our ignorance it is better to use for clinical experiments the drug, the whole drug, and nothing but the drug."

We repeat that we merely present these notes to our readers as a matter of interest, and it may prove convenient to some of them to know that a standard preparation of violet leaves is to be obtained under the name of "Liquor Viola Glucoside."

Perrier, London.—In forwarding samples of this excellent table water, which has already been noticed in these columns, the proprietors ask us to state that the London offices of Perrier, the French Natural Sparkling Table Water, have been removed from 45 and 46, New Bond Street, to 45 and 47, Wigmore Street, W.

NOTES AND NEWS.

We wish to call the attention of our members to the meeting to be held on Friday, February 2. In past years it has been usual to have a set subject for discussion, several gentlemen being invited to open and discuss the subject chosen. These meetings were not very popular, and it has been decided by our Council to hold a Pathological Evening instead, which we venture to hope will prove more successful. Our members, especially those in general practice, are invited to bring pathological specimens of any kind, microscopic slides and photographs, and to show them, accompanied by a short card of description. They will be on view for about an hour, and subsequently those who have brought specimens will be able to give a description if they should so wish it, which may be followed by a short discussion. As this is the first time a meeting solely devoted to pathological specimens has been held, it is hoped that members will support it with a large attendance.

The Annual Dinner will take place on Wednesday, February 7, at the Wharncliffe Rooms of the Great Central Hotel, Marylebone Road. It will be remembered that a trial was made last year of this hotel, and so successful was the dinner and so satisfactory the accommodation and the method in which the whole affair was carried out by the hotel authorities, that the Council has decided to repeat their experiment. For the benefit of those who were not present last year, we may remind them that the hotel is very central and

most conveniently situated near Baker Street Station. With such a popular and well-known President as Mr. Bidwell in the chair we may hope to see the largest attendance on record.

We are informed that Mrs. Lewis-Hill, who is better known in connection with philanthropic movements as Mrs. Ada Lewis, is establishing an institute for supplying daily visiting nurses for the poor of the middle classes who cannot afford the cost of a resident nurse, and suffer accordingly for want of attention, being ineligible for an absolutely charitable institution.

The "Ada Lewis nurses" will be solely available for the class mentioned, the very poor being already supplied by district nurses and hospitals. In order to prevent abuse of the scheme and to preserve the independence of the patients, a nominal charge of a few shillings a week will be paid by those availing themselves of its benefits.

The first of the Ada Lewis Nurses' Institutes has now been opened at 62, Oxford Terrace, W., and should it meet with the success expected in filling a great need, the work will be extended to other districts. A *sine quâ non* of the scheme is that the nurses will only attend cases under the supervision of the patients' own medical advisers.

The work of the "Ada Lewis nurses" will, it is hoped, also be of considerable benefit by relieving the congested state of the hospitals, which are already overcrowded with minor cases, to the exclusion of more serious ones requiring treatment.

A most interesting paper on the Surgical Treatment of Cancer of the Uterus, was read by Professor Wertheim, of Vienna, before the Section of Obstetrics and Gynæcology at the Meeting of the British Medical Association at Leicester, which met with the warm approval of the President, Mr. Herbert Spencer. The treatment of cancer of the uterus in this country is, in general, to remove the cervix in very early cases, and to remove the body of the uterus by the vagina in all those cases in which there is free mobility, with the exception of those cases where the growth is too large to remove by this method; in such cases an abdominal section has been performed. But it has been usual to decline operation in the majority of those cases where the extension of the disease was such as to implicate the surrounding structures, such as the broad ligaments, bladder, ureters and cellular tissue. Professor Wertheim showed in his paper that it was possible to operate on those cases, hitherto deemed hopeless, with a very large

degree of success, and since 1898 he has operated on some 270 patients. His mortality at first was 15 per cent., due chiefly to shock and heart failure from the prolonged operation, which at first took two hours or more; but now, with improved methods of *technique*, he has halved this, and out of his last 30 cases he had lost but two. Moreover, he was able to state that from 60 to 70 per cent. of his cases have remained free from recurrence after four years. This is a result which has hitherto been unapproached and is most remarkable.

The points he laid chief stress upon were that in the abdominal incision the parts are all fully in view, and that it is possible to make a much freer removal of the diseased growth.

That in these cases the lymphatic glands are not infected until comparatively late in disease, and even then in many cases can be removed. That it was surprising how large and infiltrating masses of cancer, involving the neighbouring organs, could be detached without causing injury to the bladder and ureters, even when closely attached, and that if this was impossible they could be resected and carefully sutured, and that recurrence in the scar and stump of vagina was unknown, the only relapses met with taking place in the lymphatic glands.

The results Professor Wertheim has obtained in these hopeless cases is astonishing, and leads us to hope that with further improvements in the *technique* of the operation and skill of the operator a still larger number of successes may be recorded, and that we may be enabled in the future to offer some hope to what have hitherto been one of the saddest class of cases to be met with.

Mr. KEETLEY has forwarded to us the following note concerning the scheme for a new Supplementary Army Medical Reserve which he is so keenly interested in, and for which he has taken so much pains and trouble; and we hope and trust many members will give him their unqualified support:—

"It has been arranged by Director-General Keogh that a short course of lectures and demonstrations upon the special features of military medical work will be given at the West London Hospital, commencing about the third week in January, at which the attendance of members of the West London Medico-Chirurgical Society is especially invited. Gentlemen wishing to attend this course are requested to send in their names as early as possible to Mr. C. B. Keetley, 56, Grosvenor Street, W. The course is free of charge. It is intended that this course shall give a broad view and grasp

of the subject, shall avoid going too much into detail, and at the same time be practical. Arrangements will ultimately be made for seeing the actual work of military hospitals and camps for such as desire it. It is wished to begin modestly and locally, but thereby to set an example and to start a movement which it is hoped will spread widely. Those members of the Society who have this business specially in hand wish to acknowledge the sympathy, encouragement, and practical help they have received from Colonel Keogh, the Director-General.

"The lectures and demonstrations will be given by members of the Staff of the Royal Army Medical Corps, who are specially qualified for each subject. The course as a whole is under the direction of Colonel James, Director of Military Studies and Superintendent of the new Royal Military College. To Colonel James's tact and organising skill the movement is greatly indebted."

THE vexed question of the addition of preservatives to milk cropped up again in a case before the magistrate of the South Western Police Court a short time previously. The defendants, a firm of dairy farmers, were charged, at the instance of the Battersea Borough Council, with selling milk containing boracic acid to the extent of 1½ grs. to each pint.

As usual the evidence of experts was conflicting, but to those of us who have had experience in the treatment of children's ailments there can be little doubt that milk adulterated with boracic acid is extremely deleterious to them; and, although it is very difficult to prove, it is probably the cause of a large number of deaths amongst infants. It will be noted that such an infant taking the normal amount of milk per diem would be also taking the maximum dose of boracic acid for its age, and this surely cannot be tolerated. We are glad to see that the Battersea Council is making a firm stand on this matter, and is determined, if possible, to exclude this product from milk altogether; and it would be well if other Councils would follow suit. The magistrate, while regretting that the Legislature had not dealt with this question firmly so as to finally settle the matter, inflicted a penalty of forty shillings and ten guineas costs.

A DISCUSSION on the treatment of mucous colitis has taken place recently in the medical journals, and the reports of the usual treatment, such as lavage, diet, the special course at Plombières, seemed to be very hopeless, very few of the cases apparently deriving much benefit from it. We should like,

however, to draw attention to the use of electricity in these cases, more especially that process known as "kataphoresis."

It is now known by electrical experts that when a galvanic current is passed through a solution of a metallic salt, such as sodium chloride, that this salt will be broken up, and that the metal will seek the negative pole and the chlorine the positive pole. This electrolytic process is known by the name of kataphoresis, and it is made use of in the treatment of chronic ulcer, lupus, and gouty concretions and enlargements, by introducing and depositing metallic salts in the very protoplasm of the cells themselves. Dr. J. Curtis Webb has recently reported a severe case of mucous colitis which he has cured by this process after failure of all the usual methods of treatment. After a preliminary lavage of the bowel he introduced a pint of a solution of $AgNO_3$, of a strength of 0·1 per cent., through a rectal tube, to which was attached the + pole of a battery. The — pole was attached to large clay electrodes placed over the stomach and back. A current of 15 milliampères was passed for about fifteen minutes, and in consequence the $AgNO_3$ solution was broken up, and the silver endeavouring to reach the — pole passed into the cells of the mucous membrane.

The result of the treatment was that the motions became natural in consistency and frequency, and a cure resulted after about ten of these electric enemata.

The case is worth recording owing to the benefit the patient derived after failure of other treatment. Of course a solution of $AgNO_3$ is often used as a rectal injection, but it seems to us that this method, which is perfectly safe and easily carried out, positively ensures that the metal will be absorbed; and hence that we may look for better results from this method than from those already mentioned.

Dr. Leonard Mark has forwarded to us some charming French verses by Monsieur Jean Robiquet, which were recited as a welcome to English visitors at a concert in Paris during the medical visit.

These he has very cleverly rendered into English, and although they have already appeared in the *Lancet*, we think they are of sufficient interest to reproduce.

A PROPOS.

Messieurs, excusez-nous . . . Notre patron Molière,
Avec une ironie un peu trop cavalière,
A jadis—sans égard pour vos prédécesseurs—
Traité Diafoirus et Purgon de farceurs.
Par bonheur pour la médecine
Ces docteurs au jargon plaisant

Qui vous assassinaient en Latin de cuisine,
N'avaient rien de commun avec ceux d'à présent.
Leur savoir s'arrêtait au siècle d'Hippocrate,
Parfois, ils confondaient le cœur avec la rate,
Et, pour guérir un mal têtu,
Lorsqu'on les appelait à l'aide,
Ils n'apportaient d'autre remède
Que l'eternel bouillon pointu.

Autres temps, autres mœurs. De conquête en conquête,
La science moderne a fait tant de progrès
Que, ce soir, Poquelin—s'il était de la fête—
Viendrait vous exprimer lui-même ses regrets,
Et, voyant l'illustre ambassade
Qu'un peuple très savant délègue parmi nous,
Il s'écrierait : " Messieurs, je veux être malade
" Pour l'unique plaisir d'être soigné par vous ! "

Mon médecin (un bon, pas un de chez Molière !)
M'a raconté que, la saison dernière
On fit, en Angleterre, aux voyageurs français
Une réception triomphale . . . Je sais
Qu'on but à leur santé d'innombrables bouteilles,
Que le Cecil-Hôtel s'illumina pour eux
Et que, trois jours durant, un monde de merveilles,
Grâce à Sir Broadbent, défila sous leurs yeux
On leur fit admirer la beauté familière
Des hôpitaux anglais dont le monde est jaloux,
Ces palais où les murs inondés de lumière
Semblent dire à la mort : " On n'entre pas chez nous ! "
Dans ces grandes maisons qui leur ovraient leurs portes,
Ils virent des tournois d'illustres bistouris,
Tandis que les sisters et les nurses accortes
Souriaient galamment aux docteurs de Paris.
Enfin, après trois jours d'inoubliable fête,
A quitter la Tamise on dut se résigner.
Mais on pouvait partir, l'alliance était faite :
Deux grandes nations venaient de la signer.

Et depuis, leurs savants, les plus fameux du monde,
Unis étroitement par le cœur et l'esprit
Poursuivent en commun la recherche féconde
Du philtre bienfaisant qui soulage et guérit . . .
—Consacrant de nouveau cette heureuse harmonie,
Puisqu'aujourd'hui, Messieurs, vous traversez la mer,
Apportant à Pasteur, notre immortel génie,
L'hommage fraternel de votre grand Lister,
Soyez les bienvenus sur la terre de France !
Entre nos deux pays il n'est plus de détroit,
Et nous vous recevons, Princes de la Science,
Comme le grand Paris a reçu votre Roi !

JEAN ROBIQUET.

A PROPOS.

Your pardon, gentles all . . . Those days are past,
When Molière, our master much revered,
With irony too keen, and scant regard
For those who earlier wore the doctor's gown,
Ordained that Diafoirus and Purgon,
Of clowns should play the part.
But happily the art
Of medicine has survived his gay contempt.
Those doctors, who of old with jargon quaint,
Killed us in Latin fit alone for cooks,
No kindred own with doctors of to-day.
Their little knowledge had been handed down
From Hippocratic times, and oft mistakes
Were made between the human heart and spleen.
And if perchance from megrim you should suffer
One only remedy they had to proffer:
Repeated douching of your sigmoid flexure,
With a diluted soap-and-water mixture.

Old times, old manners. Science such strides has made,
From conquest on to conquest hurrying,
That were our good friend Poquelin here to-night,
Playing his part in these festivities,
He would himself regret these pleasantries,
And, seeing this illustrious embassy
Sent from a land where Science holds her sway,
He would exclaim: "Would, sirs, I might be ill
Merely to be the subject of such skill!"

My doctor, who's not one of Molière's crew,
Has told me how our travellers from France
Received last year in England an ovation,
How the Cecil Hotel one festive night
Was all ablaze with electric light,
How passed the toast and counter toast
Till many a bottle gave up the ghost.
And countless marvels during those three days
Thanks to "Sir Broadbent," passed before their eyes,
The homely comfort of their hospitals
Called forth much praise—the envy of the world.
It seemed as if their wards with daylight filled
Cried out on Death: "Thou shalt not enter here!"
They saw in some of these great palaces
The champions of British surgery
Enter the lists with sterilisèd blades:
Their part to heal, not wound;
Sisters and nurses trim, the while
Alert and gay, with many a smile
For our doctors, moving round.
At length those never-to-be-forgotten days
Were over, and the Thames was left behind.
No matter! The alliance had been made,
By two great nations it had just been signed.

And ever since, united heart and mind,
These scientists have labored to assuage

"The ills that flesh is heir to." Striving both,
With minds alert and still determination,
Seeking the bubble incubation
Even in the test-tube's broth.
Wherefore, good Sirs, as you have crossed the sea
To consecrate this harmony anew,
Bearing great Lister's homage to the shrine
Of our immortal Pasteur, we acclaim
Your presence on the soil of France with joy!
Our hearts have bridged the Straits, and you to-day,
Princes of science, we are welcoming
As our great Paris late received your King!

NOTE.—Diafoirus and Purgon are the two physicians in "*Le Malade Imaginaire.*"

Poquelin was Molière's real name, the latter being the one he assumed when he took to the stage.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 71, Holland Park Avenue, W.; those concerning business matters, advertisements, non-delivery of the Journal, &c., should be addressed to the Editorial Secretary, 77, Wimpole Street, W.

Authors desiring reprints of their articles published in the WEST LONDON MEDICAL JOURNAL are requested to communicate with the Editorial Secretary, 77, Wimpole Street, W. Reprints can be obtained at the following prices, if ordered before the publication of the Journal:—

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Special rates are quoted for longer reprints.

We wish to remind members that our columns are always open to them if they will forward to us papers which may be published as original communications, or interesting cases for the "Mirror of Practice." General practitioners, as well as specialists, are constantly meeting with cases of exceptional interest to all of us, and we shall always be pleased to publish them, if they will send them at least a month before publication.

H. CAMPBELL POPE, M.D.Lond., F.R.C.S.

THE

West London Medical Journal.

Published Quarterly under the auspices of the West London Medico-Chirurgical Society.

Obituary.

H. CAMPBELL POPE, M.D., B.S.LOND., F.R.C.S.E.

Too late for record in our last number, which was already in the press, arrived the news of the sudden death of Dr. H. Campbell Pope. The society has suffered a grievous loss by his death, as to many of us he was an intimate friend, and to most he was well known. Himself the son of a medical man who practised for many years at Tring, he was educated at Haileybury, and afterwards pursued his medical studies in the Liverpool School of Medicine. He then came to London, joined the University College Hospital, and took the degrees of M.D. and B.S. of the University of London. For two years he lived at Birmingham filling the posts of medical tutor and demonstrator of anatomy at Queen's College, after which he passed the Fellowship Examination of the Royal College of Surgeons of England. In 1876 he settled in Shepherd's Bush, where he speedily gained the confidence of a large number of patients, and for many years probably enjoyed one of the most extensive practices of the neighbourhood. He took a keen interest in the work of the Medical Defence Union, and was a Vice-President at the time of his death.

Dr. Pope was one of the original Members of this Society, and served in succession as a Member of the Council, Secretary, Vice-President, and finally as President. He was a constant attendant at its meetings, at which he frequently spoke, his speeches generally being characterised by sound sturdy common sense. He was always present at the Annual Dinner, and generously helped to enliven the proceedings during the evening with a song or two as he possessed a well trained voice. He was one of the best types of general practitioner, shrewd, genial, and beloved by his patients, and his loss will be deeply felt both by his family and the many to whom he was so well known and by whom he was so much respected.

Original Communications.

ON SOME POINTS IN INFANTILE SCURVY.

By J. A. Coutts, M.B.Cantab., F.R.C.P.

The treatment of infantile scurvy is usually so rapidly efficacious that opportunities for *post-mortem* examinations comparatively seldom occur in that complaint. Owing to this, our knowledge of the pathology of the disease is still defective and incomplete. More especially is information lacking as to the changes that may take place in the periosteum, when that membrane is separated from a long bone by underlying hæmorrhage. It is mainly with a view of contributing to a more definite knowledge on this particular point that I venture to read brief notes of the two following cases before the members of the Society.

An infant, aged 8 months, was admitted into the East London Children's Hospital on August 5, 1904, under my care. The history showed that she had been suckled for only one week; after that had had Nestle's milk and barley water for five months; and for the last three months Allenbury's (No. 3) alternately with Nestle's milk. She had never had ordinary cow's milk in any form. During the last month the child had cried when the right leg was touched or moved, and six days ago the leg began suddenly to swell and was very painful. On admission the child was anæmic, but otherwise fairly well nourished. The right leg was not moved when the child cried or struggled, and was tender to touch and manipulation. There was evident subperiosteal hæmorrhage involving the lower half of the right femur, and some thickening was detectable over the lower end of the left femur. No other bones were apparently affected, but there was general tenderness when any of the limbs were moved. There were no hæmorrhages into the skin, and the gums were not spongy. By an unfortunate oversight the urine was not tested for blood until after the child had been treated with lemon juice for several days. The child was *ordered* fresh cows' milk, along with raw meat juice, scraped potato, and lemon juice. The same treatment was continued

throughout, but the weather being extremely hot, the infant had diarrhœa on several occasions which I need not detail, and the cow's milk had then to be suspended and albumin water temporarily substituted. As a safeguard, too, a small quantity of opium was added to each dose of lemon juice.

Three days after admission I saw the child for the first time. Whilst the other conditions had improved, the swelling over the right femur remained the same. Crepitus could now be elicited, and it was found that the lower epiphysis of the right femur had separated from the shaft. The limb was accordingly placed in an appropriate splint. After a fortnight in hospital the infant had lost ground, owing to repeated attacks of diarrhœa. The swelling over the right femur had increased, and now involved the whole length of the limb. At this date, August 19, my surgical colleague, Mr. Cuthbert Wallace, was consulted, and he inserted a needle into the swelling and drew off blood-stained serum.

Twelve days after this, August 31, the thigh was more swollen and exceedingly heavy, and egg-shell crackling was felt over the swelling. Two days later, September 2, Mr. Wallace cut down on the swelling, under chloroform, and found an oblong cavity formed of bone, with the shaft of the femur running up its long axis. The cavity was filled with sticky, tenacious blood clot. The child bore the operation well, but died a week after, September 9, worn out with protracted diarrhœa.

At the *post-mortem* examination nothing of importance was found, saving the remarkable condition of the structures round the right femur. This specimen from the case explains the condition of affairs better than any lengthy description. The specimen including the femur, it will be noted, has been sawn through the middle. Surrounding the femur in its entire length is a layer of new bone, formed in the detached periosteum, which in several places is thicker than the femur itself. Between the new periosteal bone and the femur is a cavity containing blood clot. The cavity is pear-shaped, and at its greatest width below is three or four inches across. It will be further noted that the detached lower epiphysis is held in position by the new periosteal bone. The specimen, somewhat a unique one, is from the Museum of St. George's Hospital, and a corresponding fellow to it is in that of St. Thomas's.

The periosteal changes in the following case afford a marked contrast to the bone formation in the last one.

Whilst the former infant was in hospital another one, aged 10 months, was admitted under my care. This one had also from an early age been fed on Allen and Hanbury's food. From the history the infant had evidently suffered from scurvy for at least three months, but the condition had apparently gone unrecognised until admission to hospital. The child was wasted and anæmic, and there were numerous purpuric patches, of varying size, over the trunk and limbs. The gums were spongy and bled easily, and the breath was offensive. There were sub-periosteal hæmorrhages in the legs, arms, and forearms. Both thighs were much shortened and swollen with a hard œdema, and felt like cold bags of sodden flesh, and they could be bent and twisted in any direction, as if the femora had entirely disappeared. The infant was evidently moribund and no exact examination of the thigh conditions justifiable, but a rapid and superficial one sufficed to show that the lower epiphysis of each femur was detached and unduly moveable. The infant never rallied and died two hours after admission.

At the *post-mortem* examination the interest again centred in the condition of the femora. In addition to the lower epiphyses, both upper ones were detached as well, and each shaft lay free in a cavity formed of blood clot and blood-soddened muscles. Each shaft, too, was rotated so that the external surface looked inwards and slightly forwards. Instead of bone having formed in the detached periosteum, as in the former case, that membrane had necrosed away, and no trace of it was discoverable in either limb.

I hoped to have shown the femora at this meeting, but the specimens have been temporarily mislaid in the pathological department at Guy's Hospital.

There are three points connected with these cases that I would beg leave to briefly discuss. The first is the importance of testing the urine for blood in every case of infantile scurvy before the patient has been treated with the usual antiscorbutics. Scurvy, in my experience, is by far the most frequent cause of hæmaturia in infants, and in a very large percentage of cases that have advanced to the stage of periosteal hæmorrhages, blood will be found in the urine by

the ordinary guaiacum test. Competent authorities, moreover, I believe, assert that in every case of scurvy, however slight, blood will be found in the urine by a spectroscopic examination. Whether this assertion be accurate or not I am not competent to judge, as I have no experience of the spectroscopic examination of urine in such cases. It may, however, perhaps be fairly said that the frequency of hæmaturia, and the value of its discovery as an aid to diagnosis, have not as yet been sufficiently and generally appreciated. In my first case, as I have said, no examination of the urine was made until after the infant had been treated for several days with lemon juice, and then with a negative result. Had the examination been made immediately the infant was admitted to hospital, I have little doubt blood would then have been found in the urine. The discovery of blood would have prevented several competent observers questioning the diagnosis of scurvy in favour of one of sarcoma, and would thus have saved the infant from an unnecessary, if harmless, operation.

Only last week I saw a case which was a striking example of the value of examining the urine in infantile scurvy. This little tibia, with subperiosteal hæmorrhage and a partially detached epiphysis, is from an infant that was in hospital under Dr. Eustace Smith. The patient was undoubtedly syphilitic, and was treated for that complaint in the out-patient department. Whilst under treatment, swelling and tenderness developed in the region of the epiphyses in several of the long bones. Although syphilitic epiphysitis is usually an early manifestation, and the patient was eleven months old, these swellings might, nevertheless, have been syphilitic in origin. The discovery of blood, however, in the urine proved that the pressing disease at the moment was scurvy and not syphilis.

My second point calls in question the advisability of surgical interference in certain cases of scurvy. It will be readily admitted that either contingency that occurred in my two cases, the formation of bone in the detached periosteum, and still more so the necrosis of that membrane, is a grave and formidable complication. It may be asked, then, as to whether it would not be advisable to incise the periosteum and turn out the clot in cases where the membrane is exten-

sively stripped from the bone and the resolution of the clot unduly delayed. It is an open secret that the operation has been done at several hospitals, in cases where the diagnosis was at fault, without detriment to the infants. In the first case, it was my fear that the nutrition of the detached periosteum would suffer that induced me to seek the opinion of Mr. Cuthbert Wallace, and he was consulted regarding the incision of the membrane and turning out the clot. He was opposed to this step, and in his decision I acquiesced. I gather from him, however, that in future cases of a similar nature he would give the procedure a favourable consideration.

My last point is one bearing both on the etiology and treatment of infantile scurvy. A short time back there was a controversy in the *British Medical Journal* on the boiling of cow's milk for infantile use, in which I had the temerity to take a part. In the course of that controversy one recognised authority claimed that he had cured "scores" of cases of infantile scurvy with sterilised milk alone, and this without the use of lemon juice or any of the usual antiscorbutics. Now, for one observer to be able to write of curing an indefinite number of scores of cases of infantile scurvy by one single method, implies an experience of that complaint that any one of us might envy him, and entitles his words to respect. That his method, however, of giving sterilised milk alone should cure a single case of infantile scurvy is inexplicable to me, in the light of the facts I am now about to furnish. Soon after the death of the first case I have related, two further cases of infantile scurvy with subperiosteal hæmorrhages were admitted into the East London Hospital, the one under my colleague, Eustace Smith, and the other under myself. Both were *ordered* fresh cows' milk, and were further treated in the usual way with raw meat juice, scraped potato, and lemon juice. In neither case, however, did the usual speedy resolution of the subperiosteal clot take place. On the contrary, in each infant a thin plate of bone formed in the detached periosteum, over which egg-shell crackling could be elicited, and this bone formation was confirmed by radiographs taken by my colleague, Dr. Graham, who has been kind enough to bring copies of them with him to-night. That three consecutive cases of scurvy should take this extraordinary course led to an enquiry, and it was discovered

that for several months the dairy company to the hospital had been supplying pasteurised instead of fresh milk, without the hospital authorities being adequately informed of the change. On the substitution of fresh for pasteurised milk each infant began to improve, but the periosteal bone had not finally disappeared in either when it was sent home after a sojourn of many weeks in hospital. Now, I can state, with a great degree of accuracy, that these three were the only cases of periosteal bone formation noted during the last twenty years in the Shadwell Hospital, and further that these same three were the only cases of scurvy treated during the time the hospital was supplied with the pasteurised milk. Such facts render one chary of accepting the reality of cures of infantile scurvy with sterilised milk, and on the contrary tend to confirm one in the long held opinion that such milks may be directly responsible for the complaint itself. A further inference might be drawn from these cases, as far as any inference is justifiable from so small a number as three, and it is that the antiscorbutic powers of fresh milk are possibly greater than those of raw meat juice, lemon juice, or any of the ordinary agents employed in the treatment of infantile scurvy.

REFLECTIONS ON THE TREATMENT OF CHRONIC OTORRHŒA.

By E. Furniss Potter, M.D., M.R.C.P.

Surgeon, London Throat Hospital.

I feel that some explanation is due for introducing such a subject as the treatment of chronic otorrhœa, which at first sight may not appear to be particularly attractive.

My reasons for doing so are: (1) that chronic otorrhœa is a very common malady, and comes frequently under the notice of the practitioner; (2) the serious nature of the condition on which it depends; and (3) the need for careful and thorough treatment.

This latter has received great attention during the last few years among special practitioners in aural work, and much brilliant work has been done, but I am not sure if

even yet the gravity, and very possible source of danger, of chronic middle ear suppuration are appreciated by the general body of the profession to the extent that they should be. At a meeting some months ago of a special society devoted to the study of ear disease, one of the members was somewhat severely criticised for the large number of radical mastoid operations which he was in the habit of performing, the implication being that the operation was resorted to in a large number of cases merely for the cure of chronic otorrhœa, in the absence of urgent symptoms, and without a full trial having been given to other than operative measures. By operative measures, I mean the radical mastoid operation, and do not include under this term minor procedures, such as curetting of granulations.

Judging by the figures quoted by this gentleman, the number of operations performed by him did seem to be largely in excess of those of other otologists. In fact, the excess was regarded as "rather staggering" by one critic. Afterwards, on pondering over the discussion, the question arose in my mind, do we perform the complete mastoid operation often enough? and does not the one who operates frequently —of course in suitable cases—do better for the safety and well-being of his patient than he whose tendency is to be more conservative? As the result of considerable thought on the subject, I am of opinion that a strong brief may be held in favour of operating more frequently than is at present the usual practice. My reasons for this I shall endeavour to give.

I presume it is admitted that a patient with a chronic discharge from the middle ear is in a state of constant menace to life, and, so long as the otorrhœa continues, is running the risk of septic trouble supervening at any time, such as abscess of brain, meningitis, lateral sinus thrombosis, and so forth.

One authority (Cheatle) likens a patient in this condition to one "walking on the edge of a precipice," another considers the danger as much as if a charge of dynamite were carried in the ear which might explode at any moment. To those who are not in the habit of giving special attention to this subject, it may be of interest—and may make more evident the reality of the danger—to mention some of the main

channels by which infective material may be carried from the septic focus in the middle ear to the intracranial tissues. These are as follows:—

Erosions, owing to carious destruction of, or natural dehiscences in, the thin plates of bone forming the tegmen tympani and tegmen antri—these are among the more frequent paths of infection. Carious destruction of the labyrinth, leading to a free communication with the internal auditory meatus; fistulous openings in the bony wall of the sigmoid sinus; numerous osseous canals containing vessels and nerves, which run from the temporal bone to the cranial cavity.

Therefore, the danger of chronic otorrhœa being conceded, the indication is obvious, that the serious nature of all such cases should be fully recognised, and should receive unremitting attention at the hands of the practitioner under whose observation they may come, and that such attention should not be relaxed until the disease has been removed and the discharge has ceased. The patients (or in the case of children their parents) should be informed of the seriousness of the complaint and the risk to life incurred by neglect.

The treatment may be considered under two heads—non-operative and operative, by which latter I mean, as I said before, the radical mastoid, or complete post-aural operation. It will perhaps not be superfluous to explain that this consists in opening the mastoid antrum, removing its outer wall, the outer wall of the attic, the ossicles, the posterior wall of the osseous meatus, eradication of diseased parts, and throwing the tympanum, attic, and antrum into one cavity.

There are a certain number of cases of suppurative disease of the middle ear in which there can be no doubt as to the indication for proceeding to operation at once, and without trying the effect of other treatment. These are stated by Ballance to be such as present the following signs: "Brain symptoms, optic neuritis, attacks of malaise, with fever and headache, vomiting, vertigo, atresia of the meatus, pain in the ear, sudden onset of facial palsy, mastoid abscess or tenderness, carious fistula over mastoid, polypoid granulations, springing from a demonstrable carious focus in tympanum or attic."

There remain a large number in which there is no special indication for immediate operation, and in these it will

generally be considered that attempts should be made to get rid of the otorrhœa by non-operative measures, and there is no doubt that in a certain number of cases by patient, unremitting attention, continued over a greater or less length of time, a cure may be obtained.

In order to bring about such a result, let us consider what is necessary to be done. If you look at any of the leading text-books on the subject, you will find detailed instructions for the daily (or twice daily) toilet of the ear. The following may be taken as fair examples of the directions given :—

"First of all a few drops of warm solution of hydrogen peroxide are to be instilled into the ear while the patient's head is so inclined that the fluid reaches the tympanic cavity; the patient is to remain in this position for five, ten, or fifteen minutes (some recommend twenty minutes), then the ear is to be syringed with warm boric lotion, the head turned over to the other side to allow the lotion to run out, the outer part of the meatus and auricle are then to be dried and a plug of cotton wool placed in the external meatus. This is to be done twice daily."

To this the following remarks are added[1] :—

"In this extremely intractable disease the prospect of recovery is greatly enhanced if all injections are done by a thoroughly competent person, such as a trained nurse, or medical man himself, and it is largely due to want of skill on the part of the individual who is responsible for syringing that so many cases will not yield to treatment."

Here is another direction[2] :—

"The tympanum is first to be washed out through the Eustachian tube with boric lotion, the external meatus is then to be cleaned and dried, after which a solution of rectified spirit and carbolic acid is to be instilled and allowed to remain for five minutes; it is then to be removed with absorbent cotton wool, and powdered boric acid is to be insufflated."

It is obvious that this direction could only be followed out by a practitioner who has devoted some special attention to ear work. It is stated that the syringing through the

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[1] Lake. "Handbook of Diseases of the Ear," p. 148.

[2] Smurthwaite. *B. M. J.*, January 28, 1905.

Eustachian tube should be done every second or third day, the rest of the process daily or twice daily.

Now what does this mean in expenditure of time? On the very lowest computation, each instillation of drops and subsequent syringing will take not less than a quarter of an hour; if you allow time for getting ready the materials and putting away the same, the whole procedure will certainly take more than this. If both ears are affected this means half an hour, so that to reasonably hope for success it is necessary to devote at least from half an hour to an hour daily to the toilet of the ear, and this to be done preferably by a well-trained nurse or surgeon himself. Some authors give more elaborate directions and lay stress on the necessity for them to be carried out by the otologist himself. I should like to know in what percentage of cases are patients likely to have the advantage of treatment carried out with the thoroughness here indicated. I have no hesitation in saying, in very few instances indeed. Even in private practice, patients will frequently be unwilling to give sufficient remuneration to a practitioner to make it possible for him to afford to spend the time which should be devoted to the necessary treatment, for of course this may have to be continued for months.

Then what happens in the hospital clinics? A patient is seen for the first time by the member of the staff in charge of the clinic; lotion, drops, &c., are prescribed, the patient is instructed how to use the same, and told to come again in a week or fortnight, as the case may be. If the case presents signs such as would suggest the desirability of the radical operation, of course a note is made and the patient kept under observation. The next time he comes he is probably seen by the house surgeon (who generally repeats the lotion and drops, or whatever it may be), and who continues to see him every one, two, or three weeks.

The patient attends at these intervals for a longer or shorter time; then, in many cases, he becomes weary of persevering with the treatment, and if a cure be not obtained in a few weeks discontinues it, and ceases to give any serious attention to his otorrhœa; for it is astonishing what comparatively little inconvenience a discharging ear causes a considerable number of persons, provided there be no pain.

That this is what happens in a very large number of cases

I am quite convinced. This being so, and it being admitted that chronic otorrhœa is a condition which carries with it grave risks to life, there must be thousands of persons in this metropolis alone who are going about in jeopardy, and who are receiving either no treatment at all, or treatment of such insufficient character that no good result can be reasonably expected. For instance, Cheatle,[1] in his report of an examination of the ears of a thousand children in the Hanwell District School, found eighty-eight suffering from chronic suppuration of one or both ears, whom he described as "walking on the edge of a precipice, six of the eighty-eight being half over."

This surely appears to be a very serious state of things, and I venture to think lays us, as a profession, open to the charge of being somewhat passive in this respect. "What should be done?" perhaps may be asked. I believe that in some Continental clinics a sufficient number of assistants are appointed, whose duty it is to specially look after the treatment of this class of cases; the patients attend as often as may be required, and receive treatment with minute attention to detail, such as I have mentioned. This is obviously impossible in London, for the majority of the patients could not afford either the time or the money to come to the hospital as frequently as would be necessary.

This brings me to the consideration of treatment by operation, *i.e.*, the radical mastoid, or complete post-aural operation.

Now I think I may safely say that this offers a certain prospect of complete removal of the disease, the cure of the discharge, and the rescue of the patient from a condition of chronic danger. The risks (as regards mortality) are practically *nil*. The only accident of any gravity likely to occur is that of injury to the facial nerve, with resulting paralysis of the corresponding side of the face. However, with improved methods of operating, and with due care, I should look upon it as a rare event for the nerve to be severed, or even for it to be directly wounded by the operator's instrument. Cases of paralysis and paresis following the operation are by no means rare, but these are usually of temporary duration (not being

[1] *Transactions Otological Society, U.K.*, vol. iii., pp. 79 and 88.

due to direct or permanent damage of the nerve), restoration of function returning generally in the course of a few weeks. However, I do not consider the risk of this accident as an argument against the operation, having regard to the much greater risk incurred by not operating; though I think it well that the patient should be informed of the fact that there *may* be temporary weakness of one side of the face for some time after the operation. The recovery is usually rapid, the patient is as a rule able to sit up in two or three days, and in ten days or a fortnight is able to leave the nursing home or hospital. Frequent dressing is required for some weeks, cicatrisation of the bony wound being completed, in the average number of cases, in from eight to ten weeks.

Under these circumstances, viz., that in so many cases the non-operative methods cannot be carried out with sufficient thoroughness—for one cause or another—and fail to effect a cure even when carried out with more or less thoroughness, and remembering that a patient with chronic otorrhœa is "suffering from a curable disease, which, as long as it remains untreated, is dangerous to life, and that to an extent which it is impossible to estimate,"[1] it seems to me that these cases should not be allowed to drift, *i.e.*, either for treatment to be neglected entirely, or only to be continued in a desultory, half-hearted fashion; but seeing that there is so little risk attendant on the radical operation, and that the results are so satisfactory, it should be resorted to in all cases in which a fair trial has been given to non-operative treatment, and in which the otorrhœa still persists. By fair trial, I suggest three, six, or even more months, according to discretion, *i.e.* if there be such distinct improvement as to justify prolongation of the treatment. In those cases in which it is not possible to ensure that the patient can have a continued period of efficient treatment, he (or, if a child, his parents) should have the condition explained to him, be informed o the risk he runs by neglect, and advised that for his future well-being he will be wise to have the operation performed.

It is with the idea of ventilating, and rousing further interest in this subject, that I have been induced to make these remarks, and reiterate views already expressed by

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[1] Lake. "Handbook of Diseases of the Ear," p. 231.

others, but which, as I have said before, I have reason to think, have not yet sunk sufficiently deeply into the minds of the general body of the profession.

WEAKNESS OF HEARING, OR THE EFFECT OF GENERAL DISORDERS OF THE SYSTEM ON EARS ALREADY SLIGHTLY DISEASED.

By Richard Lake, F.R.C.S.E.

We are too much in the habit of including all cases of deafness under two wide headings, those due to interference with the passage of sounds to the terminal filaments of the auditory nerve, and those due to interference with the transmission of sounds from the terminal filaments to the brain.

The latter class of case is usually considered as nerve deafness, and is so spoken of in most text-books. The auditory nerve, however, in common with the nerves of the other special senses, is liable to a condition of fatigue, a state of weakness, a suspension of, or inability to transmit, its special stimulus, or, to speak perhaps more correctly, to rightly interpret that stimulus; as in the eye one may have weakness of vision, so in the ear one may have weakness of hearing. We may describe this condition by saying that under certain circumstances a deafness is noticed neither of the internal nor middle ear; using the term deafness in its colloquial sense, though properly speaking, one should call it dulness of hearing; a paracusis (an alteration in the hearing). It is usually of relatively rapid onset, sometimes intermittent, and more rarely of progressive intensity. In order to enable us to correctly diagnose such a condition we are to consider an intimate acquaintance is necessary with the acknowledged and general methods of testing the hearing. *At least* two tuning forks are required, the C's of 128 and 256 double vibrations per second, Politzer's acoumeter, a modern Galton's whistle; whilst, to make the examination complete in every detail, forks from the lowest C to the fifth C in the treble clef should be employed. Perhaps in no class of aural disease is there so much need for an accurate appreciation of the value of these tests; one finds that

experience teaches us to recognise a certain uniformity in the results obtained by them. Both in middle and internal ear disease, marked deviations from the normal in such recognised summings up of the testings demonstrate the existence of a distinct group of cases, a group which under one heading would appear to belong to the middle-ear, under others to the internal ear, which enables us to distinguish an extra group, one of "weakness of hearing." Having arrived, judging from the results of a careful detailed examination, at a seemingly anomalous case, one proceeds to endeavour to strengthen one's position by enquiry as to the general state and the previous history of the patient. One will find that there is an obvious general disorder either of the nervous, digestive, excretive or circulatory system, which has intensified a comparatively trivial irregularity of the ear into a troublesome deafness. In dealing with such cases, a correct diagnosis cannot be arrived at, and proper methods of treatment adopted, unless a careful, appreciative and methodical examination of the ear has been carried out. Failing this, the mode of treatment employed will probably be directed entirely towards the relief of the deafness, on the supposition that it arises entirely from aural disease. Should, however, the general dyscrasia be at the same time recognised, and suitable treatment be added to that undertaken for the relief of the deafness, *qua* deafness, the result, in all human probability, would be that when the patient recovered, the practitioner would attribute this fortuitous result to his aural treatment, so that both he and his patient would be deceived into considering that the cure had been effected by these means, and that the general treatment was merely subsidiary; whereas the correct interpretation would be that the patient recovered as a direct result of the general treatment, and *despite* the aural treatment.

Briefly as to tests. Rinné's test is positive when air conduction is better than bone conduction; and negative when the reverse condition obtains. Gellé's test, when positive, is direct evidence that the stapes is mobile and negative the reverse.

The great diagnostic feature of the class of case under consideration is an excessive loss of bone conduction (C mastoid) compared with the high degree of hearing power, as tested

by the conversational voice, acoumeter and whisper. There is also in most instances a marked loss of aërial conduction, as tested by a wide range of tuning forks, and frequently musical tones and sounds are less adversely affected than noises.

My attention was originally drawn to this subject several years ago by observing that the results which I obtained in certain patients gave one a more gloomy view of the hearing power than was warranted by their appreciation of conversation, and the particular case which brought this condition most forcibly under my notice was that of a gentleman who had become markedly deaf during the few months previous to his coming to me. The irregularity of the tuning fork tests led me to believe that his deafness was due to other causes than to disease of the ear. I found on enquiry that he was on the Corn Exchange. At this time wheat was rising in price in a manner unprecedented during the previous fifteen or twenty years. He was holding a very large amount of corn, and I advised him to sell, and go away for a few weeks. He followed this advice, and on his return wrote to me saying that his hearing was quite restored. I must admit that at that time my tuning-fork tests were not carried out with sufficient exactness to enable me to give them in full in this case; the following cases are fairly typical. I am in the habit of considering it entirely as a neurasthenia, as apart and distinct from hysterical deafness, in which the deafness is apparently absolute and unusually sudden.

Case 1.—This was that of a lady who entertained much and went a good deal into society. She noticed for the first time, three months before consulting me, that she was becoming very deaf. In June, 1903, she observed that high voices and loud sounds caused her great discomfort, and even pain. Tinnitus was extremely troublesome, and she suffered from diplacusis and from a certain amount of aphonia. The latter symptom soon disappeared and never gave any serious trouble. I must not omit to mention that she had an invalid husband, to whom she read aloud a great deal during the intervals of her social duties. One could not say that she was absolutely deaf, but rather that she suffered from hardness of hearing, and this only on the right side, the left being absolutely normal. The testings were as follows:—

Right.	*Tests.*
C^2	... Weber.
10 feet	... Acoumeter.
10 ,, ...	... Whisper.
Negative	... Rinné.
Positive	.. Rinné C^2.
-- 40 secs.	... C mastoid (bone conduction).
Negative	... Galton.
C^2 to C^4 only heard	... Tuning forks by aërial conduction.

A particularly remarkable point in this case was that the whispered voice was heard at 10 feet for single words, and yet there was an enormous loss of bone conduction (no less than 40 secs.), a condition so anomalous that nothing short of neurasthenia could possibly account for it, the transient hyperacausis and aphonia being confirmatory. The correctness of this diagnosis was fairly rapidly proved by the immediate improvement which followed the administration of tonics and valerian. At the end of the first week the loss in bone conduction was reduced by 50 per cent., and the Rinné test became positive on the right side. At the end of four weeks the bone conduction was—3 secs., and the aërial conduction showed a gain of three octaves towards the bass. Here the neurasthenia, or brain fag, picked out as it were the weak spot in an ear in which there was a slight amount of middle ear catarrh, as shown by the residual loss of bone conduction.

CASE 2 was that of a clergyman, a man of the plethoric type. This case affords a good example of the effects of overwork of mind and body, combined with the consumption of a large amount of highly nitrogenous nourishment. This gentleman, as one might say, lived well, but he worked very hard. He consulted me for the first time in 1902. I did not at first recognise the real state of affairs, but when I did so, I sent him to Harrogate. He recovered his hearing in six weeks without any local application to the ear. He again consulted me in 1903 for a recurrence of his old trouble. The following is the result of his testings :—

Right.	*Tests.*
Positive	... Weber.
15 feet	... Voice.
1 foot	... Whisper.
1 ,, ...	... Acoumeter.

Right.	*Tests.*
C negative C^2 positive	... ... Rinné.
Slightly + or normal	. . C mastoid (bone conduction).
C^1 to C^4	... Tuning forks (aërial conduction).

This is an exceptional instance, as the most marked discrepancy is between the spoken voice and the whisper. It is probable that without my experience of the previous year it would not be considered a sufficiently good example for insertion in this paper, but with this previous experience it becomes an exceptionally useful one. This gentleman's urine showed 0·5 per cent. of sugar, and a hyperexcretion of urea and uric acid. He was referred for treatment to a physician, who informed me at the end of four weeks that his hearing had returned to its normal acuteness, and that at the moment of writing he expressed himself as being in better health, and hearing better than he had done for many years.

Case 3.—This is an interesting example of the effect of the gouty diathesis on an ear already slightly affected. He was a member of a well-known amateur orchestra, and was an excellent musician. Although he had not noticed that he was becoming deaf, his colleagues had observed that he was incapable of tuning his 'cello correctly, but always slightly sharp. This is not a usual symptom in disease of the middle ear. A more usual disturbance is a marked distaste for music. This was a case of unilateral deafness. The testings were as follows:—

Tests.	*Left.*
Acoumeter	... 15 feet.
Voice	... 15 ,,
Whisper	... 5 inches.
Rinné C	... Negative.
C^2	... Positive.
C mastoid	... — 20 secs.

Again a notable fact in this case is the loss of bone conduction, as compared with the acoumeter, the voice and the whisper. The malleus was immobile, but immobility of the malleus is the result of past inflammation, usually of an acute character, and in this case had occurred in infancy. One may also add that when the malleus is immobile, there probably exists a greater compensatory mobility of the articulation of

the malleus with the incus. This produces only a slight loss of hearing, and if no other lesion exists, delays bone conduction not over 7 secs. My patient was a man of very regular habits, not addicted to excess. As I was unable to find any lesion sufficient to account for his symptoms, I wrote to his doctor asking if he showed any signs of gout, and he replied that his excretion of urea was out of all proportion to the nitrogenous substances which he consumed. My colleague treated him for six months, and at the end of this time informed me that his hearing was much improved, and that he was therefore capable of tuning his instrument correctly. The results of testing show the following difference in his hearing after treatment.

Tests.	*Left.*
C mastoid	— 7 secs.
Air conduction	Normal.

Case 4.—Had been slightly deaf for five years on both sides, with constant tinnitus. The deafness had increased considerably of late, and was very marked in the evening. The patient had had considerable vertigo. He was obviously a neurasthenic. The testings were as follows:—

Right.	*Test.*	*Left.*
3 inches	Acoumeter	2 inches.
Over 15 feet ...	Voice	Over 15 feet.
0	Whisper	0
Positive	Rinné	Positive.
— 35 inches ...	C mastoid	— 35 inches.
5·3 inches	Galton...	5·6 inches.
C^6 38 inches ...	Tuning forks	— 28 inches.
C^1 — 20 secs. ...	... ...	C^1 — 14 secs.

In this test the good hearing power for the voice, compared with the entire loss of perception of the whispered voice and the tremendous loss of bone conduction, was so obviously an impossible condition to have resulted from any actual aural complaint, and the result of the Galton whistle so unusual, that a neurotic origin for his trouble was the only possible explanation. This opinion was confirmed by a neurologist.

Case 5.—The next case was that of a lady, extremely gouty, highly sensitive, and who had just at that time a considerable amount of worry and anxiety. She had further the misfortune to have suffered from an acute attack of aural

herpes, which had given her a great deal of pain, and would, without any other deeper aural trouble, have given rise to temporary deafness. She was treated by her medical adviser on the lines that have been alluded to, and as will be seen with complete success, except as regards a slight amount of residual deafness, which we were unable to overcome.

During the time that the herpes existed, discords and flats gave great discomfort, and severe deafness and tinnitus was complained of on both sides. Testing at first gave the following results :—

Right.	*Tests.*	*Left.*
2 feet	Acoumeter	4 inches.
Over 15 feet ...	Voice	8 feet.
6 inches	Whisper	2 inches.
Negative	Rinné C	Positive.
— 21 secs.	C Mastoid	— 29 secs.
0·9 inches	Galton	0·8 inches.
1 C to C^4	Tuning forks	2 C to C^4.

Six weeks later, after treatment with valerian :—

Right.	*Tests.*	*Left.*
Positive	Rinné C	Positive.
Normal	C mastoid	— 6 secs.
3 C — C^4	Tuning forks	3 C — C^4.

In this case our diagnostic points may be taken as the results of bone conduction, and the unusual proportions existing between the voice, the acoumeter, and the whisper, these being more marked on the right hand side.

Case 6.—L. K., aged 24. Been in South Africa for three years; been employed in several very harassing duties, the last of which had been railway construction in a very malarious district. He first commenced to become deaf in November, 1904, having had malaria in November, 1903. Tinnitus on both sides, but worse on the right, as was the deafness. From May to August, 1904, had been working extremely hard. During September, October and November his mental and bodily work had both been exceptionally severe, and he consulted me on March 27, 1905. The result of his testings was as follows :—

Right.	*Tests.*	*Left.*
2 inches	Acoumeter	2 inches.
Over 15 feet ...	Voice	Over 15 feet.
Sibillants in concha	Whisper	Sibillants in concha.

Right.	*Tests.*	*Left.*
Positive	Rinné C	Positive.
— 18 secs.	C mastoid	— $15\frac{3}{16}$ secs.
2·2	Galton	3·0
All diminished, but all heard.	Tuning forks	All diminished, but all heard.

The treatment consisted in the internal administration of liquor strych., together with ten séances of the high frequency current, but no local treatment to the ear.

In the middle of June the testings were as follows:—

Right.	*Tests.*	*Left.*
$2\frac{1}{2}$ feet	Acoumeter	3 feet.
— 8 secs.	C mastoid	— 8 secs.

In July he wrote from Canada that he considered his deafness quite cured. It had been hoped that this would be the result of the voyage.

Only last week a patient from Gloucestershire was seen by me, giving the following history: The patient, a man aged 40, had originally intended to devote his life to out-door pursuits as a farmer, but having a brother who was doing extremely well as a grocer, he was induced, with no previous knowledge of the business, after a short period of introduction, to take the control of a large business of this nature. He was very successful, and multiplied his responsibilities, marrying and having a respectable-sized family, but he was unable for fourteen years to take any holiday. He then at intervals was troubled wtth tinnitus. This was almost periodic, and he sought advice from various sources, but obtained no relief. He had recently become much worse, and the result of my examination was as follows:—

Tests.	*Left.*
Weber	—
Acoumeter	14 feet.
Voice	14 ,,
Whisper	Concha.
Rinné C	Negative.
Rinné C^{1}	Positive.
C mastoid	— $36\frac{1}{2}$.
Galton W.	N.
Gellé	Positive (giddy).
Air Conduction	—
3C 16	0
2C 32	0

Tests.	*Left.*
1C 64	+
C 128	+
C^1 256	+
C^2 512	+
C^3 1024	+
C^4 2048	— 7 secs.

Here we have an extraordinary loss of bone conduction, as well as a normal Galton's whistle and giddiness on increased external air pressure.

This man was obviously a man of neurotic temperament, which was enhanced by the life he had led, and by the unfortunate faculty he possessed for always carrying his worries with him. He suffered from insomnia, thereby making a vicious circle of worry and sleeplessness, over-work and probably insufficient ingesta. That the result of my advice as to curtailing his work, and medicinal treatment, is not yet to hand, does not prevent this case from being an extremely interesting example of the condition which I am discussing.

Gout, genuine neurasthenia, over-indulgence, when not producing troubles elsewhere, are among the more easily discoverable causes which give rise to weakness of hearing; but any pernicious habit of life will—given a suitable nerve soil, combined with a moderate amount of middle-ear disease, —produce this condition, whilst the strenuous life, the rapidity with which news, and indeed the individual, can travel, the apparent necessity for neglecting the general principles of hygiene, including the requisite amount of out-door exercise, are potential factors in its production.

With regard to treatment, it is necessary in the first place to recognise that no amount of knowledge will enable the practitioner to state with accuracy or precision the amount of aural disease which forms a substratum for the deficiency in hearing power; whilst it is always advisable to realise that, as in genuine hysterical deafness, treatment directed towards the ear itself is rarely productive of good, but when the general condition of the patient had been restored to the normal this is not so. For this reason I confidently recommend to those who have had sufficient patience to read and digest this article, to follow the lines of procedure which I myself adopt. That is to say, I endeavour to correct the

general dyscrasia before dealing with the special. It is true that, for my own part, I do not feel myself to be sufficiently equipped with a general knowledge of medicine to do so, but refer my patients either to their medical adviser or to some other competent person, seeing them later if necessary, in order to relieve such aural trouble as may remain by devoting to their benefit such skill in my own department as I am possessed of. For if the aurist will himself continue to treat these cases, especially if, as I said earlier in this paper, he combines with his aural treatment general therapeutical treatment of the patient, he will find it difficult, nay, I will say the average individual, unless he be possessed of an extraordinary amount of self-abnegation and a most judicial mind, will find it almost impossible, to avoid magnifying his aural therapy, thereby laying up for himself a fruitful source of disappointment in the future, and losing a large amount of valuable information and opportunities of demonstrating in a most satisfactory manner his knowledge and attainments.

THE TREATMENT OF CONSTIPATION AND COLITIS BY PARAFFINS AND AGAR.

By Neville Wood, M.D., M.R.C.P.

Chronic constipation is so common and so troublesome an ailment that no apology is necessary for describing in detail methods which afford relief in a large number of cases belonging to certain categories. Colitis, of which constipation is a prominent symptom, is so refractory to accepted modes of treatment, that though space will permit of only a brief reference to it, I may perhaps be excused for bringing forward suggestions which, if they have occurred to others, are certainly still unknown in some of the best informed quarters.

In chronic constipation of the otherwise healthy it seems to be too often assumed that atony or torpor of the colon is the primary cause of the difficulty.

Everyone must have met with cases treated on this assumption unsuccessfully, because, when the minimum point of effective stimulation is reached the limit of permissible irrita-

tion is overstepped, so that evacuation, irritation and retention constitute ever-recurring links in the chain of morbid action.

This is equally true whether the stimulant be dietetic or pharmaceutical. My experience leads me to believe that in a very large number of instances the symptom arises rather from an improper consistence of the fæces, due to deficiency of lubricating material or water, or from stenosis or spasm due to local morbid states. The shortage of lubricants may arise from insufficient production of healthy mucus or from excessive absorption of fats, while dehydration may be due to a loss of balance between secretion and absorption. These conditions I call, for convenience' sake, alipia and anhydria. Abnormally dry fæcal material is on the one hand moved with difficulty, and on the other, it gives rise to insufficient or irregular peristalsis.

These considerations led me many years ago to search for substances which would render assistance mainly or entirely by modifying the fæcal consistence and by lubricating the canal without adding to chemical and mechanical irritation. In out-patient and private practice together I have prescribed such agents for nearly two hundred cases. About half of these, though they afforded me useful experience, are not available for the purposes of this communication. Some were treated by agents I have since abandoned, others were too early lost sight of, or gave up the treatment without reasonable cause, and the rest are still inconclusive. There remain, perhaps, one hundred cases in which sufficient information is available for the statement of reasonable working conclusions.

Few of these patients being kept in bed or unable to follow their avocations, it was far too rarely practicable to nspect the dejecta. As, therefore, I have been obliged for the most part to rely on statements made, a numerical classification of results, though it may be of some assistance, cannot be considered as quite satisfactory. About 20 per cent. must be frankly set down as complete failures.

Owing to the difficulty of adequate supervision it is impossible to judge in what proportion this should be placed to the account of the agent itself, to a lack of intelligence in its use, or to faulty selection of cases. In their order of frequency complaints were made of: insufficient evacuation, flatulence,

nausea, and diarrhœa. Partial success in varying degrees may be claimed for 45 per cent. of the cases. By this is meant that though there was sufficient or nearly sufficient relief it was obtained by the continuous use of inconveniently large doses, or by the concurrent aid of skilled massage or small doses of ordinary aperients.

In 35 per cent. the issue has been, I believe, quite satisfactory. In these the habit of regular, easy evacuation was established in response to small regular doses, and in some cases this happy state of things has continued after the withdrawal of the lubricant.

The agents I have tested most thoroughly are, mucin, oleate of sodium, soft and liquid paraffin, and agar; but as the paraffins and agar much the most frequently yield good results, I shall confine my remarks to them. In out-patient practice the pharmacopœial paraffins were used, and in private practice either these or proprietory preparations of them. The liquid paraffin appears more quickly in the dejecta, with which it mixes more intimately. Its action is very prompt, and it is probably the better preparation with which to begin the treatment, unless there should be gastric irritability. From 1 to 6 drachms may be given in twenty-four hours, but not as a rule more than 3 drachms at a time. One daily dose, preferably at bed-time, often suffices. An occasional disadvantage of this preparation is the variability of action both in different persons and in the same person at different times. Sometimes even a medium dose passes through with inconvenient speed, though the presence of a smaller one may be difficult of recognition in the dejecta.

Experiment throws little light on such behaviour, for one set of observers have denied the fact of absorption, while another group have stated more recently that the whole of the oil cannot be recovered from the fæces. Clinically, it is found that persons taking the paraffins more often gain than lose weight. A very few patients have objected to the greasiness of liquid paraffin, and have spoken of a disagreeable after-taste. Soft paraffin in equivalent quantities passes through much less quickly, but when the correct dose has been found its action is more constant. It is usually not necessary to give it so frequently when once its action is

well established, and it is less likely that constipation will recur after its complete withdrawal. Its taste is generally considered to be quite unobjectionable, especially if a good proprietary preparation be used, and in reasonable doses it does not cause diarrhœa. When it is important to be able to demonstrate a prompt result, from one to two teaspoonfuls should be given from three to four times a day, according to the obstinacy of the case, but generally it is better to begin with a single dose at a stated time, so that thereafter a working plan can be arranged according to its observed rate of appearance and disappearance. It has exceptionally been found necessary to administer as much as four tablespoonfuls for three days in succession. This was in cases in which the discomfort had been so severe and so prolonged that no complaint as to bulk was made. Much more often two teaspoonfuls twice a day will be found to be more than sufficient by the end of a week. That which I aim at and now often succeed in, is to make a teaspoonful once a day, or every other day, serve as an effective dose, because this can be taken for a long time, perhaps indefinitely, without inconvenience.

My attention was directed to agar by Dr. Schmidt's very interesting paper in a recent number of the *M. M. Wochenschrift.* This writer has used it on a large scale, but apparently he has only lately thought of experimenting with liquid paraffin. He does not refer to the soft variety, and he does not seem to be aware that the paraffins have been used by others.

Schmidt observes that in simple cases of chronic constipation the fæces are small in bulk, not only on account of their deficiency in moisture, but also from a shortage of solids in proportion to their intake. He finds no evidence of destruction by bacterial action, so that he is led to believe that there exists in these cases a supernormal digestion of solids including cellulose, as well as excessive dehydration. The idea of the employment of agar to neutralise these conditions seems to be a particularly happy one. Hydrated agar, as is well known, is dehydrated with much difficulty, so that it serves as a water carrier to the colon and blends there intimately with the fæcal mass. Not only is agar itself unabsorbed, but according to Lohrisch's experiments with test diets it limits the absorption of cellulose, so that agar adds to both the moist

and the dry ballast of the intestine. Another important advantage is that it is highly resistant to putrefactive change. In using agar the difficulty at once presents itself of prescribing it in such a manner that the dispenser shall be able to present it in a neat and fairly attractive form. The familiar long tough strips do not lend themselves well to compression into a small bulk, and it is better not to grind it to a powder. Many attempts to gelatinise it have been made for me and by me, so that it might be cast into moulds of appropriate size, but it is precisely the characteristic and valuable property of this substance as an absorbent and a retainer of water that has rendered it impossible to make the finished product of a convenient size.

I think the most satisfactory plan is for the taker to cut the raw material into strips one inch long, and then the dose will be as many of these as he can pass into a ring fitting his ring finger. This I have several times found to be about a drachm, and taken three times a day it forms a good initial test of dosage. If it is found to be insufficient an increase is effected by using a ring of greater diameter.

Schmidt states that six drachms per diem seldom cause inconvenience, but he does not mention his usual working dose. So far I have found that for not very severe cases from two to three drachms are quite sufficient. When first taken into the mouth agar has a strange but not disagreeable taste, reminding one somewhat of half-boiled sago or of hay. On chewing it gelatinises and becomes tasteless. It is best given immediately after meals, and it should be thoroughly chewed. One drachm thus given seems to act subjectively as a gastric sedative. A practical test of the sufficiency of the dose is the inspection of the dejecta, which become moister and acquire a characteristic glisten. I have great hope that further trials will confirm my present impression that we have in it a new resource of very great practical value both in simple constipation and in some morbid conditions of the colon, especially membranous colitis. In making the choice between agar and paraffin, the character of the fæces should first be considered. We may judge by inspection or by analysis whether the deficiency is chiefly in lubricants or in water. If there be alipia the paraffins are indicated, if anhydria, agar.

Again, we may have some reason for preferring either a watery or an oleaginous dressing for the bowel. In deciding between the paraffins we may consider whether it is more desirable to intimately mix an oily substance with the fæces or to apply a lubricant to lining of the bowel. There is no physiological reason negativing the ingestion of these lubricants at any age except that agar must be well chewed, so that it is unsuitable for the edentulous at either of the extremes. Young children dislike liquid paraffin, though they will readily take the soft variety when sweetened by lactose or saccharin, or flavoured with peppermint.

In chronic colitis, primary or post-dysenteric, I have used soft paraffin alone, and as a carrier of salol, bismuth and other drugs, with extraordinary success. Obstinate cases which have proved refractory to every effort at home and abroad have been completely restored to health. I would suggest that in subacute cases agar is worthy of an extended trial. It has certainly afforded some relief in the single case in which I have used it while writing this short paper. In cases where there are kinks or stenoses soft paraffin is to be preferred, as also in the soreness accompanying piles and fissures. Flatulence has been referred to as an occasional drawback to the paraffins. It is possible they may sometimes inhibit the normal action of antiseptic and digestive secretions, or that in certain dilutions they provide a culture field for gas-producing organisms. I have not been able to ascertain whether any experimental work has already been done on the subject, but I have induced Dr. Somerville to undertake some experiments, which, however, are not yet sufficiently complete to be described here. Meanwhile I would suggest sterilisation of the paraffins. As has been previously stated there are cases which prove to be unamenable to suitably small doses of lubricants without dietetic, kinetic, or pharmaceutical assistance. With out-patients massage is seldom necessary, as it is replaced by general exercise, and it would be irksome in the short time available to attempt instruction in the art, while very little modification can be expected in diet among the poor, who are obliged to share in the meals that the family can afford. In private practice dietetic directions can be followed, and though in a few cases professional massage is of great service, it should be possible

to impart to an intelligent person an effective programme of auto-massage and Danish movements. The alterations in diet are few and not irksome. The general principles are to adjust the proper proteid and carbohydrate ratio, and to raise but little the hydrocarbon intake. The amount of indigestible materials, whether in fruit, cereals, or vegetables, must be varied according to the nature of the case. It is usually better to withhold figs and whole-meal bread, for avoidance of irritation is the keynote of lasting success. Much may depend on the nice adjustment of the intake of the softer fruits and vegetables, and here alone experience can guide us. It is wonderful how well out-patients do under the influence of lubricants, although their acquaintance with vegetables may be limited to potatoes daily, cabbages occasionally, and a baked apple once a week. The indications for massage and systematic exercises are as might be expected, obstinacy of constipation and sedentary occupation. In framing a schema, physique and temperament are to be considered, but it is always necessary to choose those movements which produce a maximum of result in a minimum of time, or there will be little chance of their being persevered with. Neither massage nor exercises need occupy more than seven minutes each, night and morning, and with a good day's exercise in immediate prospect or retrospect massage alone is required. There remain cases in which the combination of lubricants, diet, and mechanical means, does not seem to afford sufficient relief. I use the word seem advisedly, for in very many cases of chronic constipation, a vicious habit truly, a drug habit has become established. Patients have, perhaps, become accustomed for many years to such regularly recurring clean sweeps of the intestinal tract that they for a time feel miserable when this vicious overaction is discontinued. It is difficult to persuade these people that a due amount of semi-solid material should be continuously in transit. Some can never fully overcome their habit, and undoubtedly there are cases in which there is an abnormal production of, or sensitiveness to, intestinally generated toxins, so that the supplementary assistance of ordinary aperients cannot be entirely withheld. To meet this indication Schmidts' regulin and pararegulin offer a new therapeutic resource. Regulin is

agar with which is incorporated cascara, and pararegulin is the same drug mixed with liquid paraffin. In both cascara is given up slowly, so that gentle stimulation is maintained along the whole tract.

I have tried regulin now prepared by Martindale with some measure of success, but I think that as lubricants alone give lasting results in so many cases, and when they fail it is so often by reason of a real or supposed intolerance of any slowly-acting agent, that purgatives given in the ordinary way are more likely to be appreciated. Even if such supplementary assistance be ultimately found necessary, the smaller dose then effective usually does not act as an irritant, much to the comfort of the recipient and to the advantage of his general nutrition, for the intestinal tract is placed in a state of relative physiological rest when lubricants are provided, without making a demand on exhausted secretory structures.

Reports of Proceedings.

CLINICAL MEETING.—Friday, January 5, 1906.

L. A. BIDWELL, ESQ., F.R.C.S., President in the Chair.

The following gentlemen were unanimously elected members of the Society: Edward Burstal, M.B., B.Ch.Oxon, St. Bartholomew's Hospital; Martin Alfred Cooke, M.R.C.S., L.R.C.P.Lond., L.S.A., 15, Castlebar Road, Ealing; James Bernard Chalmers Francis, M.R.C.S., L.R.C.P.Lond., 18, Lower Addiscombe Road, Croydon; O. Keefstad Sillonville, M.D., Paris, 4, Rue George 1st, Aix-les-Bains; Harold Sigismund Sington, M.R.C.S., L.R.C.P.Lond., 44, St. Mary's Mansions, W.

A Case of Pernicious Anæmia.

Dr. S. BONTOR: A. J. W., aged 56, many years in Inland Revenue Department and for the last few years in Somerset House, had had considerable mental anxiety for the previous two years, and noticed slowly increasing lassitude and weakness, with disability for exertion and considerable fatigue, dyspnœa and palpitation after it, so that he had to resign his position and could only walk with assistance. First seen October 10, 1904, he was extremely pale, of "lemon yellow" type, had some pain and much flatulence after food, pulse rapid (110), small, and its rate quickly affected by movement, when palpitation and dyspnœa were produced; the apex beat was just outside the nipple line and there was a systolic murmur at the base of the heart.

The respiratory organs were normal. In the epigastrium was a large firm flat swelling about the size of a hand, painless and not moving with respiration; on the chest wall under each arm were two or three lumps the size of hazel nuts, the spleen was not enlarged. The legs were slightly œdematous. The temperature was 98·4, the urine was normal. The diagnosis seemed to rest between malignant disease and pernicious anæmia. I therefore examined the blood and excised one of the swellings beneath the arm; the blood was extremely "watery" in appearance and serum oosed from the wound in considerable quantity for eight or nine days afterwards.

The microscopical examination of the excised swelling showed that it was a lymphatic gland surrounded with fat, one of the large vessels was thrombosed and the tissue of the gland had necrosed so that it would not stain, but there was a secondary invasion with a considerable number of leucocytes; no signs of malignant growth.

The examination of the blood resulted as follows:—

Number of red cells	612,000 per cmm.
Number of white cells	7,400 per cmm.
Hæmoglobin	18 per cent. of normal
Colour index	$\frac{18}{12{\cdot}24} = 1{\cdot}47$

The red cells exhibited marked poikilocytosis and varied much in size, their average diameter being much above the normal, there were some nucleated cells, both megaloblast and microblast.

The differential count of the white cells showed a diminution in the relative proportion of adult leucocytes, and very few myelocytes were present, the result was:—

Polymorphonuclear neutrophiles	58·4 per cent.
Small lymphocytes	35·13 per cent.
Large lymphocytes	4·74 per cent.
Eosinophile leucocytes	1·51 per cent.
Myelocytes	0·22 per cent.
	100·00

This made the diagnosis of pernicious anæmia definite, as there was no evidence of malignancy, while the diminished number of red cells, some of them nucleated, the presence of poikilocytes, the high colour index, the marked diminution of adult leucocytes and the presence of myelocytes, may be said to be pathognomonic of the condition.

The patient was ordered complete rest in bed and given a liberal light diet with some raw meat juices daily, no alcohol was given at any time; small doses of arsenic were given three times a day, and night and morning 10 grs. of salol.

For the next few weeks the patient became steadily worse, he had several attacks of sickness and a large amount of flatulence with troublesome constipation; his breathing became very bad, the bronchial mucous membrane being œdematous and causing constant and troublesome cough, the swelling of the legs steadily increased until they became an absolute burden to him, as he was unable to move them without assistance; the œdema spread throughout the body, the scrotum becoming as large as a football and having to be supported in a sling. By December 3 he was in an absolutely water-logged condition. I then gave him 10 m. of tinct. apocyanum cannabinum every three or four hours, and he at once reacted to it, passing many pints of urine a day; the œdema rapidly subsided and in about ten days was practically gone; the enlarged glands under the arms and the swelling in the abdomen disappearing a little later.

The digestion improved, and his raw meat was gradually

increased to nearly half a pound a day, the arsenic was slowly increased until he was taking 20 m. liq. arsenicalis three times a day, his recovery was steady and uninterrupted; he was put on to a full diet and digested it well, the appetite becoming enormous, but the flatulence and dyspepsia were quite controlled by the salol, which he took steadily for 3 months; he was gradually got on to his feet, 5 grs. of iron and ammonia were added to his mixture as soon as he was definitely improving, and by the summer he was able to walk with perfect comfort and enjoyment eight or ten miles a day or ride his bicycle for thirty miles or more.

In May, 1905, the examination of the blood showed:—

Number of red cells	3,040,000 per cmm.
Number of white cells	4,100 per cmm.
Hæmoglobin	77 per cent. of normal
Colour index	$\frac{77}{60{\cdot}8} = 1{\cdot}25$

The red cells were practically normal in size and shape, but there were one or two nucleated cells; in the white cells there was still a diminution in the relative proportion of adult leucocytes, they were:—

Polymorphonuclear neutrophiles ...	34·49 per cent.
Small lymphocytes	58·26
Large lymphocytes	4·35
Eosinophile leucocytes	2·90
	100·00

There were no myelocytes.

Thus the blood no longer showed the characteristic features of pernicious anæmia, although the high colour index and the few nucleated red cells show that he is not quite cured.

For the last six or seven months he has remained in apparently perfect health, and one almost hoped that he might be shown as a complete cure, but an examination of the blood made December 12, 1905, showed that this is not the case, the result of the examination being:—

Number of red cells	2,107,000 per cmm.
Number of white cells	5,600 per cmm.
Hæmoglobin	75 per cent. of normal
Colour index	$\frac{75}{42} = 1{\cdot}79$

Most of the red cells are increased in size, some equal 13 mm., but most equal 10 mm., and there are a few poikilocytes and microcytes; no nucleated cells are found.

The white cells still show a marked diminution in the proportion of adult leucocytes, the count being:—

Polymorphonuclear neutrophiles ...	18·67 per cent.
Small lymphocytes	78·00 per cent.
Large lymphocytes	2·33 per cent.
Eosinophile leucocytes	1·00 per cent.
	100·00

I propose to put him on liq. arsenicalis and salol again before he gets any worse, but I bring him forward as an instance of a remarkable recovery, temporary though it be, from a very severe type of an almost invariably fatal illness.

A Case of Rupture of the Quadriceps Extensor Tendon.

Mr. C. B. KEETLEY: This man, aged 75, slipped going downstairs, tearing the quadriceps extensor away from the upper end of the patella. The tear extended right across the joint. The depression above the patella could be both seen and felt. An incision was made, a great deal of blood turned out of the joint cavity, and the separated parts united with stout catgut. This was a month ago, and we are beginning cautiously to use passive exercises. Ruptures of parts of the quadriceps extensor are not uncommon, and when not extensive, fairly good results can be obtained by massage and exercises, although treatment may have to be very prolonged.

Dr. LEONARD DOBSON: Some nine months ago I had a similar case of rupture of the quadriceps extensor, with the exception that in my case both limbs were affected. The patient, an old gentleman who was very feeble, had a giddy attack, and to save himself from falling threw himself backwards, and in doing so ruptured both quadriceps completely. The injury was very apparent, the torn muscle being drawn up into a large rounded mass, and there was a gap of about 3 inches on each side. The patient suffered so severely from shock that his life was in imminent danger for some days, so that operation was out of the question. The parts were therefore brought as nearly as possible in apposition by means of strapping, and the legs steadied by means of sand bags. Convalescence was delayed by repeated attacks of phlebitis, but in some eight weeks the patient was able to move about with crutches. He was taught to exercise the muscles of his thighs by means of an apparatus consisting of a cord running over a pulley terminating in a stirrup at one end and a sand bag at the other, and he now walks perfectly well without any support whatever.

A Case of Ruptured Kidney.

Mr. C. B. KEETLEY: In a collision between a runaway cab horse and the vehicle in which this young woman was being driven she was struck on the abdomen by the shaft of the

cab. Internal hæmorrhage caused gradually increased swelling, which, when I saw her three hours after the accident, extended across to the left side of the middle line. The right hypochondriac and lumbar regions were hard, swollen and dull on percussion. The patient had been getting steadily worse and was nearly pulseless. Through an incision in the right linea semilunaris the cavity of the peritoneum was exposed, the region of the kidney opened, clots turned out, and the pedicle of the kidney clamped and tied. The kidney was not only torn right in two, the rent extending into the pelvis, but each half was torn again in several directions. It was removed. The cavity was packed with gauze, neutral saline given in various ways, and the clamp left on the kidney stump all night. The operation was finished the next day, when the clamp was removed, the stump trimmed, an additional ligature put on, and the incision in the peritoneum carefully sutured after a drain had been carried through into the loin. The incision in the anterior abdominal wall was also sutured in layers. In a few days the drain was removed and the patient was up in about a fortnight, apparently quite recovered. The clamp was left on all night because the patient was not in a condition to run the risk of even slight recurrent hæmorrhage, or of any sudden gush of blood which might have occurred in the moments between its removal and placing on a secure ligature. I do not advise the removal of the whole kidney as a routine procedure for crushed kidney. Any piece of kidney which may prove useful should be preserved. I believe the first case in which this form of conservative surgery was applied occurred in this hospital, and was reported at the Medical Society of London on January 13, 1890. The lower end of the kidney was crushed off, but the upper part was preserved. I saw this patient some years afterwards in excellent health.

Dr. S. Bontor: About three years ago I had a somewhat similar case in a boy aged 12, who was sliding down a hill on a toboggan, when in avoiding some one in the way he ran into a hedge and was struck in the side by a stake; he had hæmaturia at once and the next day a collection of fluid in the flank made one decide to explore the kidney; this was found to be torn almost in half, and curiously enough the detached portion was loose and widely separated from its original position, being in the bottom of the collection of urine and blood and as low down as the iliac fossa, but outside the peritoneal cavity; this portion was of course removed.

The remaining portion, rather more than half, had the ureter attached with only a small rent in it so it, was decided to leave it, and it eventually healed completely; but while

the wound was still open I took the opportunity to ascertain what functional activity remained by adapting a tube to it so that the amount of urine could be collected and measured, and I found he was passing in this way an average of 18 ozs. per diem.

It is interesting to note that this boy has since then broken several school records for running and has been passed by the Admiralty Medical Officers for admission to the Entrance Examination for the *Britannia*.

Tumour of Pons Varolii.

Dr. SEYMOUR TAYLOR: Fanny M., aged 59, a midwife, was admitted under my care to the West London Hospital on December 13, 1905, suffering from the "effects of a stroke," the symptoms having come on slowly and gradually.

There is a strong syphilitic history, with evidence of the disease still existing; for she had sunken nose, exfoliation of bone from the nasal cavity, and perforation of the bony septum. The heart is healthy, the urine is normal.

It will be seen that she has all the signs of right hemiplegia, although neither motor palsy nor cutaneous sensation is very pronounced. But in addition she has paralysis of the muscles of the left side of the face.

On more careful examination it is apparent that she is suffering from the condition known as "cross paralysis," due to a lesion in the pons varolii and probably the upper part of the medulla, for in addition to the loss of power in the right arm and leg, and in the muscles of the left side of the face, she is completely deaf on the left side; there is loss of sensation in those areas of the left side of the head and face which are supplied by the fifth nerve; there is loss of power in the muscles of mastication on the left side; there is some little hitch in deglutition and some difficulty of speech, or rather of utterance, but no true aphasia.

The left arch of the palate is flattened and only partially retains its power of movement, and there is some slight dysphagia.

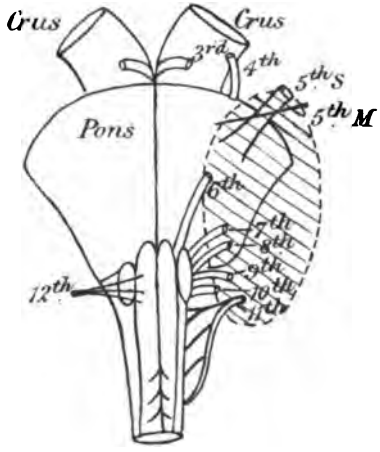
There is no oculo-motor paralysis, unless there be some sluggish movement in the left external rectus muscle. There is impairment in taste perceptions at the root and left side of the tongue, but the tongue itself is protruded straight. Except for some slight conjunctivitis in the left eye, due to paralysis of the seventh nerve, the external tunica are intact.

The cranial nerves which are involved would therefore appear to be the left fifth (both motor and sensory divisions), possibly the sixth, but the seventh and eighth certainly, the

ninth and tenth probably, and the upper roots of the eleventh, whilst the twelfth remains unaffected.

The facial muscles have lost their power of contraction to faradic stimuli. There is no optic neuritis, as I am informed by our excellent registrar, Dr. Elliot.

The diagnosis, therefore, is that there is some lesion on the left surface of the pons affecting the superficial origin of certain named cranial nerves, and extending to the decussating fibres which go to the opposite upper and lower limbs. The diagram will help to illustrate this.



The diagonal lines show the probable situation of the tumour.

The question will arise, "what is the nature of the lesion?" A meningitis would not be so limited in its effects. A hæmorrhage might cause it, but the slowness of onset, the absence of renal or of cardiac disease, would tend to negative this diagnosis, and further, the history of syphilis and the patient's gradual improvement under the influence of mercury and iodide of potassium clench the diagnosis of syphilitic gumma.

A Case of Peripheral Neuritis.

Dr. Leonard Dobson: The girl I showed this evening with loss of power in the hand, is an interesting and somewhat uncommon case. Her history is briefly as follows: She is aged 18, and has enjoyed good general health, all functions being regular. She was a desk clerk at Whiteley's. The

first appearance of any trouble was one year ago in the winter, when she noticed that the little finger had lost all feeling and had become quite cold. In a day or two the whole hand was affected in a similar manner, and she very quickly lost all power of movement of any sort, and the hand took on the appearance you have seen this evening. She was treated for two months by a local medical man for rheumatism, and then visited in succession two hospitals without relief. She finally went to Guy's, where she was taken in, treated electrically, and discharged apparently cured in one month. She returned to work this autumn, but some five or six weeks ago the symptoms commenced again in a similar manner. You will have noticed that the whole hand is swollen and of a livid red or bluish colour. It does not pit on pressure. At times it is hot and burning and at others icy cold. There is no pain whatever, but tactile sensation is apparently unimpaired. The hand is quite useless and she cannot use any of the muscles. There does not seem to be any wasting. Tested electrically, the muscles react normally to galvanic and faradic currents, and there is no reaction of degeneration. Her general health is good, but she suffers a good deal from a daily headache, no rheumatism, reflexes generally somewhat exaggerated. She has a married sister who every winter loses power in her hands, but her complaint is also painful. On a hasty examination one might at first suspect this case to be a functional one, especially as when the hand or fingers are drawn back there is a tendency for them to spring forward when released, but a closer inspection proves that this is not the case, and I think there can be no doubt but that this is a somewhat unusual case of peripheral neuritis, commencing, perhaps, in the ulnar nerve from pressure of the arm on the desk. It is true she has no pain and no wasting, but the disease has not been in existence for any length of time, and on the other hand the nutritional changes are well marked. The condition of the hand is also somewhat similar to that met with in the early stage of Raynaud's disease, and the patient says that the hand is exceedingly sensitive to the cold, and she always goes about with it wrapped up in a warm wool covering, but Raynaud's disease is nearly always symmetrical, and I have never heard of a case in which loss of power over the muscles has been a prominent feature. I am treating her with the faradic current alternating with a galvanic current of some intensity with slow interruptions, and hope to get a speedy improvement.

A Case of Obstinate Recurrent Lupus of the Nose, Treated by Kataphoresis.

DR. LEONARD DOBSON: I have shown this case, not because there is any extensive disease, but because it has shown considerable obstinacy in its treatment. The patient originally had a small and somewhat deep lupoid ulcer on the left ala of the nose, and a larger and more superficial one formed later on the right ala. This was treated as a case of lupus some two or three years ago by an X-ray specialist, who gave her some sixteen sittings before he could get the ulcer satisfactorily healed. About a year afterwards the ulcers broke down again, and she came under my care. I first of all scraped them with a spoon and then exposed them to the X-ray from a medium soft tube for five to ten minutes at a time at a distance of 6 inches, the rest of her face, of course, being carefully protected. In spite of the previous scraping, however, it took some nine or ten sittings to get the ulcers to scar over. They remained sound for some six or nine months, and she then returned to me with the disease as bad or worse than before. I then determined to try the effect of kataphoresis. It is quite easy, as you are probably aware, to obtain a considerable deposit of any metal in the tissues by this method, which depends on the fact that when an electrical current is passed through a solution of a metallic salt, this solution is broken up and the metal will seek the negative pole. The *modus operandi* is as follows: The positive electrode, which should be made of carbon or some such material and covered with a piece of lint, is soaked in a solution of sulphate of zinc and placed on the surface of the ulcer, and a large flat sponge electrode connected with the negative wire is placed on the back. A current of about 10 to 20 milliampères is then passed for ten minutes. At the end of this time the ulcer will be found to have a pearly-white appearance, due to the fact that the zinc ions have penetrated the tissues in their effort to reach the negative pole. A considerable reaction will take place around its edges, and healing sets in remarkably quickly, so that in this case three sittings only were required to get the whole surface of both ulcers, with the exception of a small piece the size of a pin's head at the edge of one, healed. The sittings must not take place more than once weekly, as the reaction is considerable, and as the healing process goes on so quickly it is unnecessary. The results of this form of treatment, which is now being carried out by several electrical specialists, more especially Dr. Lewis Jones, will be of great interest, as, if satisfactory, it will very materially simplify the apparatus—such as the Finsen lamp, X-ray tube, &c.—necessary, as most practitioners are in possession of a small constant current battery.

A Case of Lupus Erythematosus.

Dr. P. ABRAHAM: This is a very remarkable abnormal case of so-called "lupus erythematosus." The young woman states that the affection commenced about eight years ago "like a ringworm" on the top of the head. Other patches subsequently appeared on the scalp, gradually coalescing and leaving bald areas. Six months ago a red patch appeared on the nose, and shortly afterwards others on the forehead and cheeks: all these have increased in size and coalesced, so that at the present time practically the whole of the face and the greater part of the scalp are implicated. Superficial scarring can be seen in places, especially on the scalp, and Hutchinson's typical "orange-peel" appearance can be seen in the conchæ of both ears. The patient suffers from feeble circulation, with chilblains of the fingers, but no permanent erythematous patches upon them. Her general health has been good. One point of interest in this case is the obstinate ulceration on the scalp, a very rare concomitant of lupus erythematosus, which I have not yet succeeded in healing in four months.

The case reminds me of two others of lupus erythematosus which have been under my care in the West London Hospital. One, a man (photograph now exhibited), had the whole of the face very similarly affected, and also patches on the chest and back. He had been for a considerable time treated at one of the large hospitals for supposed psoriasis, showing how easily the diagnosis of the disease can be missed. The other was a girl who was admitted in this hospital in a condition very like that of the present patient, only the face, scalp, and fingers being implicated. The condition, however, gradually spread practically over the whole body. She died in about ten months with pyæmic abscesses in the lungs.

Mr. GEORGE PERNET: With regard to Dr. Abraham's case, I should be glad to know if there is any albumin in the patient's urine, as albuminuria is not an unlikely complication. As to Dr. Dobson's case, which he has treated by kataphoresis, the patient is at the present moment suffering from a rodent ulcer of the nose. I cannot say what the condition was before X-rays and kataphoresis were employed, but now I am quite sure the patient has got a rodent ulcer in the part treated.

A Case of Progressive Muscular Atrophy.

Dr. A. SAUNDERS: This patient, a case of progressive muscular atrophy, is aged 76. Ten years ago he had a fall upon the right shoulder and his right arm became completely paralysed. He was treated by means of massage and elec-

tricity, and in six months had completely recovered. The paralysis was due, no doubt, to a traumatic neuritis. Two years ago he noticed that he had some weakness and wasting of the muscles of the right hand, which, with the exception of some temporary improvement at first when treated locally with massage and electricity, has gradually progressed. Six months ago he noticed that the left hand was also becoming weak. The wasting of the muscles is of the ordinary type.

I show him to-night as an illustration of a not infrequent history in such cases of disease in the cells of the anterior nerve following on inflammation of the nerve-trunks, and due probably either to damage to those cells at the same time or to a slow extension to them from the damaged nerve-fibres.

Dr. SEYMOUR TAYLOR: One interesting point in this case is the fact that the patient appears to be an educated man, gaining his living by his brain rather than by his muscles. Most cases of progressive muscular atrophy which I have seen have been men (or women) who have been subject to severe or prolonged muscular strain.

As regards treatment, I have found the best results to accrue from judicious use of electricity and a careful feeding of the patient, who should have a dietary in which cod liver oil, or other fatty foods, were liberally afforded.

Dr. ARTHUR SAUNDERS: I am much interested in the cases that Dr. Seymour Taylor has cited of chronic strain resulting in this disease. The damage to the cells of the anterior horn in these cases is probably of chronic origin, while in those with a history such as is present in the case I show to-night, it results from a single injury. I thank him also for his suggestion as to giving an increased amount of fat in the diet of these cases.

A Case of Rickets.

Dr. A. SAUNDERS: This patient, aged 14, is a case of rickets in which there is great deformity of the bones of the arms, especially of the fore-arms, while the legs are hardly affected. The head and thorax present also marked signs of rickets. In the first year of life the boy was brought up almost entirely upon Nestle's milk, and though he cut teeth towards the end of the first year, he was unable to walk until eight years of age. He used, however, long before this to move himself about on the floor by wriggling himself along on his buttocks, while his weight was largely supported on his arms, much in the way that the chimpanzee may frequently be seen to do.

The strongly curved bones of the arms, and their contrast with the straight legs, well shows the effect of the transmission

of the patient's weight at this stage upon the softened rhachitic osseous tissue.

A Case of Congenital Elevation of Scapula (Sprengel's Deformity).

Mr. ASLETT BALDWIN: The patient is a girl, aged 10, and as the name indicates, the trouble has been present since birth, although the mother thinks it came on at 2 or 3 years of age, but it would be, of course, quite easy for the condition to have been overlooked at first. The left scapula is elevated both in its relation to the thorax and also in its relation to the other scapula. Not only is the scapula elevated, but it is rotated so that its inferior angle reaches the middle line of the back. The muscles which attach the bone to the spine are shortened, but appear to be functionally active. The two scapulæ are practically the same size. Scoliosis is present, the concavity of the curve being towards the affected side. In some cases muscles have been absent, the scapula has been more or less deformed, and bony outgrowths have fused the scapula on to the spine. Other bony deformities have been present in the neighbourhood. In some cases some improvement has been obtained by division of the contracted muscles and removal of bony projections. In this case I do not propose to do any operation. The condition is of interest as it may be mistaken for disease of the spine. Only two days ago Mr. Jackson Clarke told me of a case of this sort he had seen lately; the patient had been kept on her back for three years, under the supposition that it was a case of spinal disease.

Mr. C. B. KEETLEY: Although these cases are rare, a considerable number have now been published. The elevation of the scapula is always accompanied by changes in the spine or ribs in the immediate neighbourhood, especially often by a very localised short lateral curvature involving only three or four upper dorsal vertebræ. Mr. Baldwin's case is an example of this. She has also what feels like a cervical rib. Success has been claimed for the treatment of some of these cases by division of the levator anguli scapular and other shortened muscles. I have left my own cases alone.

A Case of Embolism of the Arteria Centralis Retinæ.

Dr. A. ELLIOT: I am indebted to Dr. Saunders, in the absence of Dr. Beddard, for permission to show this case. Three weeks ago, while bicycling, the patient, a lad of 17, became suddenly "blind" and fell from his bicycle. On getting up he found that he was able to see quite well with his left eye, but the right was completely blind. On admission to the hospital he was found to be suffering from

embolism of the central artery of the right retina. A certain amount of recovery has taken place. The nasal half of the retina has become functional, but there is very little vision on the temporal side. The left retina shows a peculiar condition, viz., a bright scintillating spot—like highly polished metal—in the macular region. I do not remember ever to have seen a similar condition in the fundus. It resembled somewhat the sparkling particles of cholesterine occasionally seen in the vitreous, but differs from these in being of much larger size, and fixed. I should be glad to have an opinion as to its nature from those who have examined the eye.

It is not, however, on account of the fundus changes that the case is shown, but rather to elicit the opinion of the members of the Society as to the causation of the embolism. Three days after the patient's admission to hospital a careful examination of the heart showed the following points:—

(1) The right border extended one inch to the right of the right sternal margin, the left border was just inside the left nipple line.

(2) There was no thrill, but the apex beat was more than usually distinct to palpation.

(3) The first sound at the apex was slightly accentuated, and was reduplicated.

(4) There was very marked accentuation of the second sound at the pulmonary base.

The pulse showed no marked peculiarity. These signs have persisted with the exception of the accentuation of the first apical sound.

I should like to ask the opinion of more accomplished auscultators than myself whether the diagnosis of mitral stenosis is justifiable in a case such as this which presents the following features: (1) A peripheral embolism; (2) enlargement of the right heart; (3) distinct evidence of increase of tension in the pulmonary circulation; (4) a "doubtful"—I think reduplicated—first sound at the apex.

The only point that is wanting is the characteristic presystolic murmur, but this is a physical sign that is occasionally absent in undoubted mitral stenosis, even in the early stage before there is any question of failure of cardiac action. Personally, I think the diagnosis is warranted, but I should be glad to have the opinion of others on the point.

Dr. ALEXANDER MORISON: The clinical history of this case points to embolism in all probability from a cardiac valve as the cause of the ocular signs and symptoms. I do not think the absence of an ascertainable rheumatic history is any argument against the patient's having suffered from that disease. The percussional and auscultatory signs are as

related by Dr. Elliot, but I confess that the character of the first sound at the apex of the heart does not, to my mind, appear sufficiently marked for the diagnosis of mitral constriction. I attach more importance in this case to the diagnostic value of the basic signs, and especially to the abnormal accentuation of the second sound as heard in both para vertebral grooves. This, together with the increased cardiac area, the occasional reduplication of the second sound and the occurrence of embolic occlusion of the central retinal artery, leave little doubt in my mind of the correctness of Dr. Elliot's diagnosis of mitral stenosis.

Mr. H. BALME: With regard to the scintillating spot that is seen in the macula of the left fundus, I would suggest that this is probably congenital in origin. Quite recently I have seen two similar cases, both of which were probably congenital.

A Case of Ichthyosis Simplex.

Mr. GARRY SIMPSON: My attention was first drawn to the little boy with ichthyosis simplex when he was a few weeks old, the nurse remarking on the extreme dryness and scaly state of his skin. These cases are always congenital and due to an error of development of some kind.

The colour of the scales varies according to the position, thus on the knees they are black. He is very sensitive to cold and the skin chaps readily, the hair is somewhat brittle and the nails break easily. The mother tells me that on two or three occasions the disease has been mistaken for the desquamating stage of scarlet fever. As far as treatment goes I intend to try warm baths and soft soap, followed by repeated inunction with lanoline.

With regard to Mr. Garry Simpson's case, in a very dry scaly eczema of the scalp a cure has been effected by washing the head night and morning with Wright's coal tar soap, and then rubbing in afterwards a "toilet paraffin," which I believe is a rock oil to be procured at a hairdresser's. Dr. Abraham, I believe, called it D. oil.

Mr. GEORGE PERNET: The case is, as described by Dr. Simpson, one of mild ichthyosis. Thyroid is useful in such conditions, but its effects must, of course, be watched. The skin should be inuncted with some fat, such as mutton suet, lanoline compound, &c., to keep it as smooth and supple as possible.

ORDINARY MEETING.—Pathological Evening, Friday, February 2, 1906.

LEONARD BIDWELL, Esq., F.R.C.S., President, in the Chair.

A very successful meeting was held, at which there was a very large attendance. The pathological specimens were on view between 8 and 9.15 p.m., after which the President took the Chair.

The following gentleman was unanimously elected: Major Austen Smith, I.M.S., M.B., B.C.Cantab., M.R.C.S., c/o Messrs. Holt and Co., 3, Whitehall Place, S.W.

A handsome gold and enamel badge was presented to the Society by Mr. L. Bidwell for the use of the President, and was accepted on behalf of the Society by Mr. LAWRENCE, who then in appropriate terms invested the President with the same.

Various lantern slides were then thrown on the screen.

The following is a list of the pathological specimens exhibited:—

The President: (*a*) Tumour of omentum, (*b*) sarcoma of femur, (*c*) carcinoma of pylorus, (*d*) various calculi, and (*e*) photographs.

Mr. C. B. Keetley: Lantern slides.

Mr. McAdam Eccles: (*a*) Stomach from case of gastrectomy, (*b*) section from growth in the mouth.

Mr. A. W. G. Woodforde (introduced by Mr. Eccles): Spirochætes of (*a*) relapsing fever, (*b*) syphilis, (*c*) Vincent's angina, (*d*) urethra.

Dr. D. W. C. Hood: Drawings.

Dr. Mansell Moullin: (*a*) Fibroma of uterus, (*b*) ectopic gestation, (*c*) salpingitis.

Dr. A. E. Russell: Microscopic specimens.

Mr. J. G. Pardoe: Microscopic specimens.

Mr. Hamilton Wright: Microscopic slides of beri beri.

Dr. J. R. Lunn: (*a*) Photographs, (*b*) specimens, (*c*) microscopic section.

Mr. Geo. Pernet: (*a*) Microscopic slides, (*b*) photographs.

Dr. A. Morison: Lantern slides.

Dr. L. S. Dudgeon: Microscopic slides.

Mr. W. L. Harnet: Microscopic slides.

Dr. O. Grünbaum: Gumma of ventricular septum, &c.

Dr. L. Mark; Diagrams.

Dr. F. Sherwill Dawe: Microscopic slides and bones.

Dr. J. A. Coutts: (*a*) Infantile stomach with stenosis of pylorus, (*b*) obstruction of duodenum (infantile).

Mr. Chisholm Williams: X-ray lantern slides.

Mr. R. Lake: Microscopic slides.

Dr. D. Arthur: Skiagrams.

ORDINARY MEETING.—Friday, March 2, 1906.

LEONARD BIDWELL, Esq., F.R.C.S., President, in the Chair.

The following gentlemen were unanimously elected members of the Society: Geo. G. Borrett, M.R.C.S., L.R.C.P.Lond., Staff-Surgeon, Royal Navy, c/o Admiralty; L. A. Clutterbuck, M.D.Durh., F.R.C.S.Ed., M.R.C.P.Lond., 43, Welbeck Street, W.; Louis E. Dartnell, M.R.C.S., L.R.C.P.Lond., Royal Navy, 50, Campden Hill Square, W.; Frederick James Dixon, M.A., M.B., B.C.Camb., 163, Cromwell Road, S.W.; C. H. S. Lincoln, M.R.C.S., L.R.C.P.Lond., Captain I.M.S., c/o Messrs. Grindlay and Co., 54, Parliament Street, S.W.; Ernest H. Shaw, M.R.C.S., L.R.C.P.Lond., 52, Edric Road, New Cross, S.E.; C. E. A. Wilson, B.A., M.B., B.Ch.Oxon, 13, Collingham Road, S.W.

On "Some Points in Infantile Scurvy," Dr. J. A. Coutts read a paper on this subject (for which see p. 78).

Dr. BOYD JOLL: I congratulate the President in suggesting that cases of scurvy rickets should be left in the hands of the physician or general practitioner. Such cases are nearly always those of artificially fed infants, who have been badly fed on patent foods and condensed milk, and this leads us to consider the scorbutiferous element of such feedings. I think the relative absence of fresh cream is one of the most important factors causing scurvy rickets, and this is lamentably below par in most of the patent foods and condensed milks. I prefer the fresh gravity cream to centrifugalised cream, although the latter contains a larger relative proportion of fat, and preservatives of the boric acid type are more frequently found in patent separator milk. I prefer the alkaline citrates to lemon juice as antiscorbutics. I regard with much interest and approval the "Budde" process of artificial feeding as largely carried out in Sweden and Denmark. It consists of adding a small quantity of a 30 per cent. solution of H_2O_2, and submitting the milk for three hours to a temperature of 52° C., which destroys most of the pathogenic germs, while retaining the taste and nutrient properties of the milk, which can be kept in bottles for about ten days without deteriorating, and all this without materially altering the price of the milk. The infant mortality in Scandinavia is about half that of England. I have seen at least a dozen cases in the past few years, and believe it is much more common than usually supposed, and I am pleased that the last case I saw escaped the surgeon's knife, as had been suggested, and the child got perfectly well by careful dieting rather than drugging, and I strongly recommend the surgeon who wants to keep down his operative mortality to

be sparing of the knife for subperiosteal or other hæmatomata that are met with in these cases as their results are commonly demonstrated in spirit bottles in the pathological museum.

Mr. FRY: The chief interest in a case of mine, seen also by Dr. Saunders, lies in the fact that the child was well nourished, and its parents in good circumstances. The child had been fed for the first three months on barley water and boiled cow's milk, for next nine months on Allenbury's No. 3 food, made with boiled cow's milk. The child had a subperiosteal hæmorrhage of the lower epiphysis of the left femur, and its gums were affected, and when put on unboiled cow's milk and orange juice it rapidly got well.

Dr. J. C. MUIR: I have known several infants develop scurvy while being fed on Pasteurised food containing 3-4 per cent. of fat, 6 per cent. carbohydrate and about 2 per cent. proteid, so that the symptoms were not due to deficiency of fat but to absence of the fresh antiscorbutic elements.

Dr. J. COUTTS: With regard to the President's remarks I would not wish to be understood as favouring operative interference in ordinary cases of the complaint, but in very exceptional ones, where the separation of the periosteum from the bone is extensive and long sustained, there is a grave and real danger that the membrane may be permanently damaged by its prolonged separation from the bone, in such cases I think a surgical opinion should be sought as to the advisability of incising the membrane and turning out the blood clot. I can fully corroborate Dr. Saunders as to the frequency in which cases of scurvy are mistaken for paralysis at the outset, and this, too, where there has been no reason to suspect that separation of an epiphysis from the shaft of any bone has occurred. A much more frequent mistake, however, in my experience, is for them to be regarded as rheumatic, notwithstanding the fact that rheumatism is practically unknown at the age in which scurvy usually occurs in infants. I have never seen any reason to consider a diminution of fat in the diet as an important factor in the etiology of the complaint, and, on the contrary, have known numerous cases where the disease was contracted when the infant was taking its full complement of fat.

Reflections on the Treatment of Chronic Otorrhœa.

Dr. E. FURNISS POTTER read this paper (for which see p. 83).

Dr. J. B. BALL: The thanks of the Society are due to Dr. Furniss Potter for bringing this very important subject before us in the interesting paper he has just read. Our

position with regard to chronic discharge from the middle ear is very different from what it was twenty-five years ago. At that period it was not a very uncommon thing for a medical man to treat this complaint as of little importance, and even to advise patients to leave it to nature. At the present day no member of the profession is ignorant of the serious consequences which may attend the neglect of a discharge from the ear. On the other hand the public still requires to be educated in the matter. Many people still seem to think that a discharge from the ear should not be meddled with, and that its continuance is not only free from danger, but is in some way beneficial. Perhaps we are not sufficiently active in instilling into our patients the necessity of curing a middle-ear suppuration as speedily as possible. Our duty is clear. We must urge on our patients the importance of curing an otorrhœa by whatever means are necessary, and if it cannot be cured without operation, to urge the necessity of operation. It is sufficient for us that there is a danger in allowing the disease to continue. We need not exaggerate the danger. It is very difficult to estimate it or to put it in figures or percentages. If we consider the anatomy of the ear and its relationship to the intracranial structures, the thinness of the antro-tympanic roof, the proximity of the mastoid antrum and cells to the lateral sinus, and the various paths and channels along which infection may spread from the diseased ear to the cranial cavity, we must feel that the danger is very imminent in every case. On the other hand one cannot but feel surprised when one considers the frequency of otorrhœa, especially among the poor, that cases of intracranial disease of otitic origin are not more frequent than they are, and it is evident that a large proportion of cases escape these complications. At any rate the insurance offices have all come to take a serious view of applications from persons suffering from chronic otorrhœa. Many offices decline all cases outright when a chronic otorrhœa is present, and no office takes a case of this kind at the ordinary rate of premium. The chief reflection which comes to one's mind, in view of the frequency of cases of chronic otorrhœa, is that the great essential is to treat the acute stage, so that the case shall not pass into a chronic condition. At this stage almost every case is curable with very little trouble.

Mr. RICHARD LAKE: The few lantern slides I show are to illustrate points in Dr. Potter's paper. I think Dr. Potter is doing a good work by bringing this matter before us, but I think also that he leaves us in a position of having to choose one of two instead of three alternatives, as so-called ossiculec-

tomy or removal of ossicles, &c., offers a valuable means of treatment, most useful to busy people, not so severe, less expensive and entailing a shorter absence from work, and after all said the time required for complete cicatrisation of a mastoid is very uncertain.

Mr. E. PERCY PATON: I have had under my care a number of cases in which I have done the radical mastoid operation with very satisfactory results. One of the troubles that sometimes occurs in these cases is a falling of the ear on the side operated on. This, while not of much consequence among the poorer classes, is of some importance among the better classes, as it causes a rather unpleasant deformity. With regard to the reasonableness of doing this operation more frequently than has been usually advised, it seems to me that it would be well to follow somewhat in the wake of the advice now so freely, perhaps sometimes too freely, given in case of appendicitis as to the removal of the appendix.

Dr. E. FURNISS POTTER: In reply to the President's question as to the effect of the radical mastoid operation upon the hearing, I am in agreement with what Dr. Ball has just said, viz., that in the majority of cases there is no appreciable alteration, in some the hearing is improved, and in a few it is made worse; but this in my opinion should not be allowed to weigh in the scales in deciding for or against the operation, as the effect upon hearing is of secondary importance when viewed in comparison with the risk of intracranial complications. As to the proportion of cases which develop serious complications out of the total number, it must be a practical impossibility to make even an approximately correct estimate. I have either heard of or read of some one—an American I think—who attempted to do this, and as far as I can remember he came to the conclusion that the proportion was about one in eighty-eight.

I agree with Mr. Lake that in a certain number of cases the milder measure of ossiculectomy will be attended with satisfactory results—notably those of attic disease with a perforation in Shrapnell's membrane, and in which there is fair reason to suppose that the disease is confined to the incus and malleus—but it is difficult to be certain of this, therefore I am of opinion that in the majority of cases the thoroughness of the radical operation offers the best prospect for complete removal of diseased parts. To counteract the tendency to dropping of the auricle alluded to by Mr. Paton, Ballance advises that a crescent-shaped piece of skin be removed from the posterior lip of the wound; then if the post-aural flap be brought up and stitched, the auricle will be hoisted up to a level with that of the opposite side.

As to grafting, I am under the impression that it is not so much practised now as it was three or four years ago, mainly I think for the following reasons, viz., that a second operation is much objected to by patients, that there is some uncertainty of the graft "taking," and that such good results can be obtained without resorting to this procedure. In some cases, however, it cannot be denied that the results of grafting in shortening the healing period are brilliant.

The Mirror of Practice.

TWO CASES OF ABDOMINAL SURGERY.

By F. Swinford Edwards, F.R.C.S.

Case 1.—Acute obstruction due to impaction of gall-stone in ileum: enterotomy; cure. On March 14, 1905, I was sent for to see an old lady, aged 65, a patient of Dr. Fergusson, of Richmond, in consultation with himself and Dr. Gardiner.

I found her complaining of abdominal discomfort with a dry tongue. The temperature and pulse were normal. The abdomen, which was well covered, was somewhat distended. There was dulness over the cæcum, with marked resistance at McBurney's point, pointing to some lesion at or near the ileo-cæcal valve. Fæcal vomiting had occurred three times, the last occasion being three hours before I saw her. There had been no action of the bowels for five days, in fact, since she took a rhubarb pill, soon after which she felt a sudden pain in the abdomen. She had consulted Dr. Fergusson on two or three previous occasions for abdominal pain with diarrhœa and sickness, but these attacks were by no means severe. There was no history of the passage of blood or slime with the motions. As it was now about midnight and the symptoms were not particularly urgent, we decided to postpone operation to the following day, more especially in view of the fact that the abdomen had not been prepared for operation.

The anæsthetic was administered by Dr. Fergusson, and Dr. Gardiner kindly assisted me. An incision was made over the site of the supposed lesion through the right rectus sheath. The fibres of the rectus were separated and the posterior layer of the sheath and peritoneum incised. Digital examination at once revealed a hard mass impacted in the ileum about 6 inches from the cæcum. The gut on the proxi-

mal side of this was much thickened and inflamed, its peritoneal coat for a distance of about 8 inches being covered with flakes of lymph. The mass was delivered through a longitudinal incision about 1½ inch long, at a site opposite the mesentery. It proved to be a large gall-stone, oval in shape, measuring 1¼ inches in length, and having a circumference of 2¾ inches. It was tightly grasped by the bowel, and resisted all attempts at dislodging it upwards or downwards, prior to incising the gut. Halsted's mattress sutures were employed for sewing up the intestinal wound, and the abdominal wall was closed without the insertion of a drain. Five days afterwards the patient was doing well, and had passed much flatus per rectum, though in the morning she had passed some blood. I put this down to the possible separation of some slough caused by the impaction. Some hazeline injections were given and no further bleeding took place. On the eighth day after the operation as no action of the bowels had occurred, although flatus passed readily, small and repeated doses of mist. alba were given, followed by a boracic enema, which produced a very copious and watery evacuation, after which she suddenly collapsed, pulse 140, cold extremities and sighing respirations. There was no bleeding from the bowels or any sudden pain, tenderness or distension of the abdomen pointing to rupture. The presumption is that the portal system had been depleted too rapidly. The patient rallied after free stimulation with an injection of ether and strychnine, and a subcutaneous injection of two pints of normal saline solution into the submammary region ; but only after the lapse of eighteen hours was her condition free from anxiety. For the subsequent notes I am indebted to Dr. Fergusson, who states that the following day the temperature rose to 101·6°, and the wound looked red, with a slight oozing from the lower angle, so a stitch was cut and the wounds partially opened up, giving exit to pus. The temperature and pulse promptly dropped. After this the patient made a good recovery, and the sinus which led down to the rectus sheath healed soundly in due course.

Obstruction due to the impaction of a gall-stone is by no means common. It is difficult to conceive that a stone such as the one with which we had here to deal could have passed down the common bile duct. A theory has been advanced, and is, I believe, generally accepted, that such a stone finds its way from the gall bladder directly into the duodenum by ulceration, but in this case no history of any severe pain in the hepatic region at any time could be elicited.

No doubt the obstruction became total, owing to the inflammation and spasm set up by the presence of this foreign body.

CASE 2.—Suppurative appendicitis, in which five operations were necessary to restore the patient to health :—

(i.) Laparotomy for the drainage of an intra-peritoneal abscess.

(ii.) Enterotomy for the relief of intestinal obstruction.

(iii.) Lateral anastomosis of small intestine with a view to closure of the artificial anus later.

(iv.) Closure of opening in ileum by sutures.

(v.) Repair of fæcal fistula and closure of abdominal wound.

G. D., a young man aged 21, was seen by me in consultation with Dr. Woodforde on December 16, 1903. He was suffering with suppurative appendicitis, and I ordered his immediate removal to the Hospital with a view to operation.

He gave the following history : three weeks previously he had a typical attack of appendicitis—acute abdominal pain, vomiting and tenderness over McBurney's point. Symptoms gradually subsided, but after a time the pain recurred and steadily became worse. On admission the temperature was 101·6, pulse 100. The abdomen moves slightly on respiration and there is no distension. He says the pain is less. There is marked rigidity of the recti, especially the left. A tumour can be felt in the hypogastrium and left iliac region, which is extremely tender with impaired resonance. There is also marked resistance and tenderness over McBurney's point. No œdema nor redness of skin. Per rectum, a marked fulness in Douglas' pouch with tenderness on pressure.

December 22, operation : suprapubic incision two to three inches long. On opening the abdomen extensive adhesions were found between the coils of intestines, owing to which the appendix could not be located, and on separating some adherent coils of intestine towards the pelvis a large abscess cavity was opened, giving exit to about a pint of stinking pus. It extended into the right iliac fossa. The general peritoneal cavity had previously been shut off by strips of gauze. The abscess was gently syringed out with hot boracic solution, and a large rubber drain inserted, two pieces of gauze being left in the wound to protect the general peritoneal cavity.

The patient rapidly improved after this and his temperature fell to normal on the 30th, at which it practically remained throughout the subsequent course of the case. His pulse was 80, of fair volume.

On January 10, 1904, the following note was recorded : Although the abscess cavity is closing rapidly, the patient's general condition is becoming worse. For several days past he has complained of attacks of griping pain in the upper part of the abdomen, which is there distended and rigid, and at times the coils of intestines can be seen clearly mapped out.

Vomiting is now a marked feature ; nutrient enemata have been given for the past few days, as anything given by the mouth is at once returned. The vomit is not fæcal. There has been no action of the bowels for the last six days, in spite of aperients in large doses. In the upper abdomen distinct splashing can be elicited on tapping the parietes, evidently the intestines here are full of liquid. Rectal examination shows much ballooning, but no fæces can be felt ; a flatus tube could not be passed any distance. The following day, as the patient's symptoms pointed to obstruction, due, in all probability, to the adhesions seen at the previous operation, I decided to operate, and I was fortunate enough in having the assistance of my friend and colleague, Mr. Keetley.

Second operation : The abdomen was opened in the region of the appendix. On entering the peritoneal cavity a small abscess was found containing a concretion of the size of a cherry stone with two or three drachms of pus. In the upper part of the wound distended coils of small intestines were seen, but the cæcum and lower part of the ileum were collapsed. The former was firmly bound down by adhesions, and in places covered with recent lymph, one patch of which covered an ulcerated aperture the size of a shilling, through which, no doubt, the concretion had escaped. This was closed at once with a row of Lembert's sutures, and after freeing the cæcum by dividing adhesions, the appendix was found lying behind it. It was about six inches long and sharply kinked, but not ulcerated. This was ligatured and removed. An attempt was now made to locate the seat of obstruction, and to facilitate this the old central wound was opened up again. In this region there was much intestinal matting, but only coils of empty small intestine presented. As the patient's condition was now such as to contraindicate any unnecessary prolongation of the operation, the central wound was closed in its upper part and a drain inserted in the lower. A coil of distended small intestine was fixed in the upper part of the iliac wound—opened and a Paul's tube inserted, through which a large quantity of liquid contents at once escaped. The rest of the wound was closed by sutures, excepting in the lower part, through which a drain was inserted into the abscess cavity in which was found the concretion.

Five hours afterwards the patient had rallied. Had been sick, complained of pain. Pulse 130, low tension, but of fair volume.

The following day, viz., January 12, his condition was much improved, and he was taking nourishment by the mouth.

January 15: Paul's tube was not acting well so it was removed. Patient improving from day to day.

January 17: Much excoriation of skin about wound, owing to the acid condition of the intestinal contents, which caused the patient much pain. To remedy this I considered that the time had come to carry out short circuiting of the intestine.

This operation, number three, was performed on January 19. An incision eight inches long was made through the linea alba, the lower end terminating in the upper angle of the old central incision. On the abdomen being opened, I first identified the coil of gut carrying the artificial anus. From this the small intestine was traced upwards to the duodenum, measuring about six feet in length. The intestine was then traced downwards from the artificial anus for another six feet, where a mass of adherent intestine and omentum caused the obstruction. An attempt was now made to separate the matted coils of intestine, but this was found an impossible task. So I turned my attention to tracing the ileum from the cæcum to the obstructing mass. The gut here was free for about six inches. A lateral anastomosis was here effected, by means of a Murphy's button, with the lower portion of gut which extended between the artificial anus and the obstructing mass. In this way one obtained a little over twelve feet of functional small intestine, with (for the present) an artificial anus in its centre. The long central incision was sewn up, but no attempt was made to close the artificial anus, this being left for a subsequent occasion.

On January 22, as a preliminary to the closure of the fæcal fistula, I endeavoured to destroy the spur by the application of a large pair of clamp forceps, in lieu of an enterotome. I might here say that the bowels had acted naturally the previous day.

On January 26 the fourth operation was carried out, as the forceps which had been applied to the spur in the artificial anus had done their work well. The intestine around the fæcal fistula was separated from its connection with the abdominal wall, in doing which the peritoneum was opened in two places. The opening in the gut was closed by two layers of sutures, the first through the mucous coat and the second through peritoneal and muscular coats. The wounds in the peritoneum were closed by sutures, but the opening in the parietes was left open in part, having in view the possible giving way of the intestinal wound, the complete closure being postponed for a future occasion.

Forty-eight hours afterwards, viz., on January 28, the note says that no leakage had occurred, and the patient was doing well.

February 5: Murphy's button was passed this morning. The stools are quite formed now. The patient eats well, and though still emaciated is putting on flesh.

February 12: A slight leak has taken place to-day, and one can see a small aperture in the gut. Accordingly the fifth operation was performed this afternoon. The opening in the gut was closed by a couple of mattress sutures and the edges of the wound in the parietes paired, the aponeurosis carefully separated from the underlying gut, and brought together by a continuous silk suture, except for a gauze drain at one spot, leading to the intestinal lesion. The skin wound was closed, except for the gauze drain, with silkworm gut.

A small fæcal fistula again formed, but finally closed of itself during the next month, and the patient left the hospital with the fæcal fistula healed in the beginning of April.

I saw this patient the other day, three years after this series of operations. He looks well and feels well, and has no abdominal discomfort whatever.

RECURRENT GENERAL INFECTION FROM A SMALL CHRONIC ECZEMA.

By Alexander Morison, M.D., F.R.C.P.

A single lady, aged 40, originally consulted me for Graves' disease in which the thyroid and cardiac signs were more marked than the ocular. In time both tachycardia and thyroid enlargement lessened, but a mitral systolic bruit, organic in character, remained. Later, she had recurrent febrile attacks, in which the temperature rose to 102° and 103°, lasted on an average about a week, and after intermissions of greater or less duration returned and followed the same clinical course. The attacks were termed influenza and were treated by salicylates.

She had also a chronic eczema on the lower portion of one tibia, for which she used a mildly mercurialised ointment. This eczema she was loth to expose.

I saw her in consultation, on one occasion, in the country, during one of her so-called attacks of influenza, about two years ago. Twelve months ago she spent a few weeks in London and was confined to bed with one of her "influenza" attacks. I had an opportunity of seeing her. The attack followed the course already sketched, and after a few days there was a complete subsidence of symptoms and the case was apparently at an end. In a few days, however, there was a typical recurrence, without any discoverable cause in

the organs generally. She complained, however, of some pain on the inner aspect of the left thigh. On examination there was found a small portion of phlebitic vein. I then had an opportunity likewise of examining the carefully concealed eczema on the same leg. The dermatitis was chronic, scaly, and with scattered pustules. I regarded this as the probable cause of her recurrent and inexplicable "influenzas," and advised continuous dressing of the eczematous surface with weak carbolised lotion. The small phlebitis suppurated and was incised. The pustules in the dermatitic surface disappeared and the eczema itself was then cured. With the initiation of this local skin treatment her temperature fell and the patient was soon free from all constitutional disturbance. I was informed by a relative of hers a few days ago, that she was now in very good health and had had no recurrence of "influenza" since the cure of her skin disease.

No bacteriological examination of the blood, pus, or textures in this case was made, but there is no doubt in my mind that the mistaken sense of modesty which caused this patient to conceal the ugly patch of eczema on her leg, likewise contributed to a long history of illness, and it is a matter for congratulation that the recurrent infections did not lead to more serious consequences.

The case appears interesting both etiologically and therapeutically, and points both to the difficulty in some cases and to the necessity for discovering the cause of mysteriously recurrent symptoms. *Cessante causa cessat et effectus.*

TWO CASES OF PAPILLOMATOUS CYST OF THE PELVIS.

By G. Drummond Robinson, M.D.

Case 1.—A patient at the West London Hospital under the care of Mr. Swinford Edwards complained of pelvic pain, and on vaginal examination an elastic movable tumour, the size of an orange, was discovered in Douglas' pouch. The patient was a single woman, aged 50, whose only complaint was of pain in the pelvis and legs. At the request of Mr. Swinford Edwards, Dr. Drummond Robinson incised Douglas' pouch through the vagina, and with some difficulty drew the tumour into the vagina and then through the vaginal orifice. The difficulty experienced was due to the fact that the tumour was very movable and slippery, and that it was desired to remove it unruptured.

It was found that it was attached by a pedicle about two

inches long, and as thick as medium-sized string, to the left broad ligament, near the fimbriated orifice of the Fallopian tube. The left ovary was quite normal and bore no anatomical relationship to the tumour. So fine was the pedicle that it was divided without ligature and there was no hæmorrhage. The patient made an uninterrupted recovery.

On section the tumour, which was the size of a small orange, was found to be very thin walled. It contained clear watery fluid and its inner surface was studded with small papillomata. The origin of this cyst is doubtful, it is possibly a cyst of the hydatid of Morgagni.

CASE 2.—A lady, aged 32, was attended in 1904, at a miscarriage—the result of her first pregnancy—by Mr. H. G. Wharry, who discovered an elastic mass in Douglas' pouch. The patient was not again seen until December, 1905, when in the third month of pregnancy she experienced attacks of sharp abdominal pain. Dr. Drummond Robinson in consultation with Mr. Wharry found an elastic tumour impacted in Douglas' pouch; it could not be detected above the fundus of the gravid uterus. On abdominal section the gravid uterus was found studded with small fibroid nodules, the tumour in Douglas' pouch was situated more to the left side of than behind the uterus. It was the size of a large orange and the gravid uterus had to be pulled forward through the abdominal wound before it could be extracted from the pelvis, where it was adherent with recent adhesions. It was found to be a papillomatous cyst of the right ovary with a long pedicle. This pedicle was in close contact with the posterior surface of the gravid uterus, the tumour itself being to the left of the uterus. It seems probable that pressure of the pedicle against the posterior surface of the uterus produced attacks similar to those produced by "torsion" of the pedicle. In spite of the considerable manipulation necessary to remove the tumour, the patient made an uneventful recovery, without the slightest attempt at an abortion.

As this tumour was impacted in the pelvis, delivery *per vaginam* of a child at full term would have been impossible, and ovariotomy was the only satisfactory treatment available. Exactly the same line of treatment would have been carried out if this case had been seen for the first time during labour at full term, since it was impossible to push the tumour up out of the pelvis. The wrapping of the pedicle round the uterus from right to left in this case is very unusual and probably caused attacks of pain.

A CASE OF SEVERE CONTUSION OF THE URETHRA.

By Herbert W. Chambers, M.R.C.S., L.R.C.P.

J. F., aged 52, fell astride the buffer of a railway truck on September 12, 1904; he immediately felt a strong desire to micturate, and passed a considerable quantity of what appeared to him to be pure blood.

He managed to get home without assistance, though in considerable pain, and bleeding from the urethra. He was seen by me about three hours after the accident, when I found some hæmorrhage still going on and a swelling about the size of a large chestnut in the perinæum; that region and the scrotum were black from extravasated blood. He informed me that he was able to pass water, and had just done so, showing me about half a pint of urine, blood stained, and containing some clots.

Realising the improbability of extravasation of urine, and that the swelling was due to blood and blood only, he was kept in bed with ice compresses applied to the part, and frequently changed. A suppository of renaglandin and morphia (gr. $\frac{1}{8}$) was inserted into the rectum. The renaglandin suppositories and ice compresses were continued for a week, and I am sure controlled the hæmorrhage. Blood was passed with urine for about three weeks in gradually diminishing quantity, absolute rest on his back being enforced. It was now observable that the stream of water was being diminished in volume, and a month after the accident was distinctly small. Careful instrumentation revealed a tight and impassable stricture about five inches from the meatus. Mr. John Pardoe saw the case with me on October 8, and found by the urethroscope a central opening situated in the bulb.

Dilatation was commenced by Mr. Pardoe eight weeks after the accident, when a filiform French bougie was now able to be passed, and was steadily carried up to No. 14 French scale. Increasing sizes of Lister's steel bougies were afterwards used once a week up to No. 16, English scale. The intervals were increased to a fortnight, a month, two months, and now, seventeen months after the accident, he has a urethra of perfectly normal calibre, admitting a No. 16 steel bougie after six months' absence of instrumentation.

Remarks.—This case, which at first appeared of so serious a nature, has turned out remarkably well. In cases of this kind so much depends on a prompt decision as to operation, that only strong evidence against laceration, and consequently extravasation of urine, would make one adopt an expectant attitude. In this instance the fact of being able to pass

water freely, and the indication by discolouration of the tissues that the perineal swelling was due to blood and not urine, determined the diagnosis of contusion and not laceration. Early instrumentation would have been highly injudicious, and no doubt have torn the softened tissues of the urethra and converted a contusion into possibly a laceration. Had the swelling increased with local signs of inflammation and elevated temperature, an incision would have been made at once, and the stricture dealt with later.

The waiting attitude was clearly the right thing, and while allowing time for the blood to be absorbed enabled the urethra to recover itself and permit subsequent instrumentation.

Hospital Notes.

Cases from the Skin Department.

By G. Norman Meachen, M.D., B.S., M.R.C.P.

Case 1. *Lichen planus in a Child aged* 11 *months.*—The patient, a male infant, was brought up to the hospital by its mother with a history that a rash appeared upon the buttocks, wrists and knees a fortnight previously. It was very irritable, as the child was continually rubbing itself. The family history was good; four other children all being healthy. This child had been breast-fed.

On examination, the eruption was seen to consist of numerous discrete, raised, shiny papules, grouped chiefly about the wrists, inner sides of the knees and buttocks, but also affecting the forearms and shins. A few papules were present upon the cheeks. No lesions were seen in the buccal mucous membrane. The rash affected both surfaces of the limbs alike. Few, if any, of the lesions were definitely angular, but many presented a minute greyish scale in the centre. All were of a dark red colour, and the whole appearance of the eruption was different from a papular eczema, which, perhaps, it most resembled. The trunk was very little affected. There had never been any moisture exuding from the papules, and there were no evidences nor any history of congenital syphilis. Moreover, the palms and soles were quite clear.

A weak lotion of cyllin was ordered, together with the Ung. Metall. Co.

All authors are agreed as to the rarity of lichen planus in infants. Kaposi observed the disease once in an infant of 8 months, and twice in children between the ages of 3 and

4 years. Colcott Fox has recorded seven cases occurring at an early age. It is believed by some that the affection is prone to appear in weakly subjects, especially where there is some constitutional taint, as of syphilis or of scrofula. The present case certainly does not accord with this view, as the child seemed well-nourished and far from being debilitated.

CASE 2. *Urticaria Pigmentosa in an Adult.*—The patient was a married woman, aged 31, who complained of severe pruritus which, she said, began regularly about 5 o'clock in the afternoon, and persisted, more or less, all night, disturbing her rest very greatly. The trouble began six months ago, the rash coming out "like white bumps." In the morning there would frequently be nothing visible. The interior of the mouth, including the tongue, had also been affected, so that her speech would, at times, "become stifled." Her eyelids would swell too, so that her children would say to her, "Mother, you look like a Chinese now!" The irritation connected with the rash has been so severe that she would become quite exhausted after prolonged scratching. She had had four children and two miscarriages, but no other illnesses. She acknowledged, however, that her living had lately been very poor.

On examination, the skin over the whole of the back was covered by dark red-brown pigmented macules, which did not present any definite grouping. The normal skin was rather more pigmented than usual. There was no evidence of any herpetiform arrangement and dermatographia was absent. The anterior aspect of the trunk was affected to a much lesser degree. There were no "hæmorrhagic specks" in the centre of the lesions, so that pediculosis could be excluded.

Pigmentation is not a common sequela of urticaria, still less is the affection known by the name of "urticaria pigmentosa" frequently seen, and in adults it is distinctly of an unusual occurrence. A recent analysis of this affection by Dr. E. Graham Little,[1] who has collected 154 cases from the literature, shows that in only 14 per cent. the disease first made its appearance above the age of puberty. He describes one case in a woman, aged 37. It is often very persistent, lasting for years, though much can be done in the relief of itching by suitable applications. Microscopic examination of the pigmented areas invariably shows the presence of "mast-cells" in the cutis.

CASE 3. *Tertiary Syphilis having a Resemblance to Rosacea.*—A man, aged 37, came up to the hospital for a sore nose. Twelve

[1] *Brit. Journ. Derm.*, vol. xvii., 1905, p. 428.

years ago he contracted syphilis, and underwent a course of treatment both in London and the provinces. He also attended this hospital eighteen months ago for the same manifestation of the disease, and was practically cured. He left the district, discontinued treatment, and once more presented himself in the skin department.

On examination, the tissues about the sides and tip of the nose were considerably hypertrophied, so that, at first sight, the condition looked like one of bad rosacea. Closer inspection, however, revealed that actual loss of substance had occurred, and here and there were scabs and minute fissures. The adjacent parts of the cheeks showed also superficial scarring. The buccal mucous membrane was fissured in several places, and there was a large perforation in the soft palate just above the uvula. Other scars were visible on the inner side of the arms.

He was at once put on ten grains of potassium iodide thrice daily, and a lotion made up of equal parts of the lot. nigra and the lot. pot. chloratis was prescribed for bathing the lips. The resemblance to acne rosacea was, perhaps, less marked this time than at his first visit, eighteen months ago, but severe cases of this affection, especially if accompanied by much thickening and chronic congestion of the parts involved, are occasionally mistaken for syphilis, and *vice versâ*. In the present instance, the existence of scarring and loss of substance, apart from any history of specific trouble, was quite sufficient to render the diagnosis clear.

I am indebted to Dr. P. S. Abraham for kind permission to publish these notes.

Reviews and Notices of Books.

MAX BRAUN ON THE ANIMAL PARASITES OF MAN.[1]

BRAUN'S book on human parasitology is the standard work on the subject, and the rapidity with which it has run through three editions testifies to its utility.

Recent work has made it necessary to add considerably to the chapters on "Flies and Ticks," additions which will be found of exceptional value to students of tropical medicine. Excellent is the only adjective which describes the book; the translation is all that can be desired, the English lucid, the print clear and the plates beyond reproach.

The volume is well bound, but nevertheless one feels that it is a pity that it has been found necessary to publish at a price more than three times that of the German edition.

HUTCHISON ON PATENT FOODS AND PATENT MEDICINES.[2]

THIS little work, consisting of two lectures, one on "Patent or Proprietary Foods," and the other on "Patent Medicines," is well worth perusing. The author takes the various proprietary foods seriatim and discusses them both from their dietetic and monetary value, pointing out that in the majority of cases it is far better and certainly cheaper to make use of the ordinary articles of diet.

We quite agree with him in these statements, as we consider that the sale of these proprietary foods and meat juices is largely due to ignorance of their composition and dietetic value. There is a useful chapter on the Composition of Infants' Foods, and the lecture on Patent Medicines, in which the ingredients of the more widely advertised nostrums are given, will be read with interest.

BERRY'S LECTURES TO TEACHERS ON THE PREVENTION OF INFECTIOUS DISEASES.[3]

THIS is a reprint of five lectures on Infectious and Contagious Diseases delivered to the teachers engaged in the schools of the Wigan County Borough Council, and they are admirably adapted for the purpose for which they were written. The various infectious

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[1] "The Animal Parasites of Man." By Dr. Max Braun. Translated from the German by Pauline Falcke, brought up to date by Louis Sambon, M.D., Naples, and Fred. W. Theobald, M.A. With 294 illustrations. Third Edition. Price 21s. London: John Bale, Sons and Danielsson, 1906.

[2] "Patent Foods and Patent Medicines." By Robert Hutchison, M.D., F.R.C.P. Second Edition. Pp. 47. Price 1s. net. London: Bale, Sons and Danielsson, 1906.

[3] "Lectures to Teachers on the Prevention of Infectious Diseases." By William Berry, F.R.C.S.I., D.P.H. Pp. 64. Price 6d. Bristol: John Wright and Company, 1906.

diseases are described in plain and simple language, technical terms being carefully avoided. The symptoms and incubation period of each disease are given, followed by rules for detection of the disease and the precautions to be adopted in checking its spread. A description of the contagious and parasitic diseases, such as ophthalmia, ringworm, scabies, pediculi capitis, follow, and the book concludes with an article on disinfection. We are glad to see that no attempt is made to include any methods of treatment. This book should be placed in the hands of teachers in every school.

THORNE-THORNE ON THE NAUHEIM TREATMENT OF CHRONIC DISEASES OF THE HEART.[1]

THIS book is written to enable medical men who have had no previous knowledge of the Nauheim treatment of heart disease to avail themselves of this valuable therapeutic agent in the patient's own residence.

We heartily recommend it to those practitioners who wish to make use of this method of treating heart complaints, as it is written in a thoroughly practical manner, and anyone following the directions will be enabled to give a course of the baths with satisfaction to himself and his patient, and he will be surprised in what a large number of cases he will find these baths to be of great benefit. A full description of the Schott exercises which may be used during the courses of baths is given in this edition, illustrated by photographs.

This is the best and most practical short work on this subject that we have had the opportunity of perusing.

MANSON ON TROPICAL DISEASES.[2]

THE lectures printed in this book were delivered at the Cooper Medical College at San Francisco, in the autumn of 1905. From the nature of the work the survey of the field of tropical medicine is necessarily somewhat restricted, but Sir Patrick Manson's effective style and suggestive phraseology have succeeded in transforming a series of detached clinical lectures into a homogeneous treatise. The gaps of course are visible, but they are bridged with such skill that they do not impair the attractiveness of the volume. If one wished to interest a layman in the subject of Tropical Medicine there is book which would do so more effectually than the present.

The volume opens with an introductory chapter upon the geographical distribution of the diseases called tropical, in the course of which Sir Patrick finds occasion to make many suggestive remarks as to the past and future history of these diseases. After this intro-

[1] "A Practical Guide to the Administration of the Nauheim Treatment of Chronic Diseases of the Heart in England." By Leslie Thorne-Thorne, M.D., B.S.Durham. Pp. 75. Illustrations 56. Price 3s. 6d. net. London: Ballière, Tindall and Cox, 1906.

[2] "Lectures on Tropical Diseases." By Sir Patrick Manson, K.C.M.G., M.D. Illustrated. Price 7s. 6d. net. London: A. Constable and Co., Ltd., 1906.

duction he discusses the subject of Ankylostomiasis, recounting the latest discoveries on the point of the propagation of the disease. The chapter which follows on the Guinea worm, is perhaps the most interesting in the book. Sir Patrick appears to have a genuine affection for this extraordinary creature, and describes the life-history with an enthusiasm to which the spoken word must have given an added force, but which is still discernible in the printed page. From this he goes on to the subjects of filariasis, malaria, trypanosomiasis, kala-azar, and tropical fevers, with their diagnosis and treatment; and on all he finds something new to say, or at least succeeds in putting the old facts in a new and striking light. The last lecture deals with those problems, and they are many, in which at present but little progress has been made. Most interesting are the remarks of the author on the subject of the influence of the formation of the Panama canal on the spread of yellow fever. The same views were promulgated by Sir Patrick about three years ago in London, and excited much discussion at the time; but to us his reasoning appears so sound that it is a pleasnre to find them here in print. The infection of yellow fever has so far not extended from Central America to the shores of Asia, and the suggested reason is that hitherto the time of passage between the ports of the two countries has been so long that the germ has died out, so that in some cases the vessel which has had infected mosquitoes on board has entered latitudes in which the germ or its hosts can no longer live. But with the opening of the Panama canal these safeguards will disappear, and with fast steamers sailing direct to the Chinese ports from Central America the outbreak of yellow fever on the coasts of China may quite legitimately be expected. Quarantine, says Manson, will protect Asia, and quarantine at Panama is one of the responsibilities which America must face.

Sir Patrick Manson ends his lectures with a strongly worded appeal for the endowment of research in tropical diseases, and such an appeal from such a source is certain to find a response in America. Even in England, where we are probably much slower to appreciate the working of science, tropical medicine has succeeded in finding a certain amount of endowment. We wish that Sir Patrick would use some of his eloquence, not only for the cause of tropical medicine, but for that of medicine generally.

CULLINGWORTH ON OLIVER WENDELL HOLMES AND PUERPERAL FEVER.[1]

COMPARATIVELY few of those who have read and enjoyed the Autocrat, the Professor and the Poet at the breakfast table, are aware that Oliver Wendell Holmes, as far back as 1843, published a paper containing the strongest clinical evidence that puerperal fever is a contagious disease, conveyed most frequently from patient to patient by the medical man in attendance at the confinement. Dr. Culling-

[1] "Oliver Wendell Holmes and the Contagiousness of Puerperal Fever." By Charles J. Cullingworth, M.D., F.R.C.P. Pp. 35. Price 2s. 6d. London: Henry J. Glaisher, 1906.

worth points out that the death-rate from puerperal sepsis in the British Isles has in no way diminished in private practice since the publication of Holmes' paper. It is well that all who are interested in midwifery practice should be aware of this sad fact, and we heartily commend this most interesting and instructive little book to the attention of our readers.

GOULD ON THE INFLUENCE OF THE VISUAL FUNCTION UPON THE HEALTH.[1]

THERE are thirteen chapters in this book and two appendices, of which only two chapters can be considered as coming correctly under the chief title; Chapter II., the Life Tragedy of John Addington Symonds, and Chapter III., Taine's Ill-health. These two are amusing and interesting enough if one can allow the premises on which they rest to be sufficiently established. The remainder of the book is a collection of Essays concerning the influence of visual function, pathologic and physiologic, upon the health of patients. Two of these essays are reprints from English authors, one being by Simeon Snell, F.R.C.S.Ed., on "Eye Strain as a Cause of Headache and other Neuroses," the other by C. Ernest Prouger, F.R.C.S., on "Slight Errors of Refraction and their Influence on the Nervous System." There is also an introduction by the author, which is clearly partly an answer to some criticisms of the theories expressed in the former volumes of this series, which criticisms were evidently of such severity that he thinks fit to bring charges of ignorance and incapacity against his critics, and to speak disparagingly of the profession generally. Concerning eye-strain he tells us that "the continent of Europe still lingers in pitiful barbarism upon this subject," and that "in England the light is breaking." This is sufficient to indicate the style in which the introduction is written, and further comment would serve no good purpose.

Chapter I. is devoted to what is called The New Ophthalmology, though why it should be called new, is difficult to discover, except so far as extravagance of ideas concerning well-known facts may be regarded as new.

Chapter VIII. is interesting and instructive, dealing with The Optic and Ocular Factors in the Etiology of the Scoliosis of School Children, and well repays careful reading.

In conclusion, there is much of value in the book, but one must guard against being carried away by the facility of the writing and the ardent imagination and enthusiasm of the writer.

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[1] "Biographic Clinics." Vol. III. Essays concerning the Influence of the Visual Function, Pathologic and Physiologic, on the Health of Patients. By George M. Gould, M.D. Pp. 500. Price 5s. net. Published by Rebman, Ltd., 1906.

McLATCHIE ON ELECTROLYSIS IN THE TREATMENT OF FACIAL AND OTHER BLEMISHES.[1]

A SMALL pamphlet dealing with the treatment of minor ailments by means of electrolysis. The author does not enter into any detailed description of the apparatus necessary, but confines himself to a description of the slight technique necessary for the carrying out of such small operations as epilation, the destruction of small nævi, and the like, and he does not appear to give any more information than may be found in any ordinary text book on the subject.

ST. THOMAS'S HOSPITAL REPORTS.[2]

THE Medical Report by Mr. A. Mavrogordato and the Surgical Report by Mr. Cyril A. R. Nitch, together with the reports from the special departments, comprise the greater part of the volume, which is as usual full of interest.

Obituary notices of Sir John Simon and Mr. Alexander Mackellar are given, and various papers, among which there is an interesting report on 1,075 cases of appendicitis, conclude the volume.

CHANCE ON BODILY DEFORMITIES.[3]

THE first edition was published in 1862, before the researches of Mickulicz, Macewen, and other modern surgical pathologists, and before the practical revolution in surgery produced by Lister's teaching had transformed orthopædic surgery. This work, therefore, has a mainly historical interest. It contains references to a considerable number of interesting cases, and states at full length the author's views on the causes of deformities. The editor has added some apt notes here and there, and also some sketches of rare deformities. As might be expected in the case of a work dating from forty years ago, many of its statements as to simple facts would be regarded now as quite erroneous; for instance, at page 138 fig. 75 is described as "A leg of an infant with congenital curvature of the fibula and tibia." It is morally certain that it is really a sketch of the leg of an infant with congenital absence of the fibula, and the same may be stated of fig. 76. One of the most interesting parts in the book is that in which the author protests against Sir Benjaman Brodie's remarks about special hospitals. The publication of the new

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[1] "Electrolysis in the Treatment of Facial and other Blemishes." By J. W. P. McLatchie, M.B., C.M. Pp. 19. Price 1s. London: Henry J. Glaisher, 1905.

[2] "St. Thomas's Hospital Reports." Vol. xxxiii. Edited by Dr. H. P. Hawkins and Mr. W. H. Battle. London: J. and A. Churchill, 7, Great Marlborough Street, 1905.

[3] "Lectures on Bodily Deformities." By the late E. J. Chance, F.R.C.S., Surgeon to the City Orthopædic Hospital, Senior Surgeon to the Metropolitan Free Hospital. Edited by John Poland, F.R.C.S., &c. Second edition, vol. i. Pp. xlviii., 315. London: Smith Elder and Co., 1905.

edition of this book is apparently due to filial respect, Mr. Poland having undertaken the task of editing it at the request of the late Mr. Chance's family. It is well printed and bound.

LITERARY NOTE.[1]

A BOOK of interest to the Medical Profession particularly, now in the press, is entitled "On Leprosy and Fish Eating,' by Jonathan Hutchinson, who was formerly president of the Royal College of Surgeons.

It comprises statements as to the history of leprosy, its nature, its prevalence in different countries, and the conditions under which it has disappeared from many. Facts are brought forward to show that it is not ordinarily contagious, and that its real cause is the use, as food, of badly-cured fish. There are chapters on the influence of sex in relation to leprosy. of religious creed, and poverty. An account is given of the author's tours in South Africa and India, and the measures for the suppression of leprosy are fully discussed. The volume contains maps and illustrations.

FERNANDEZ CLARKE ON INDIGESTION.[2]

THIS is a small, unpretending and yet, in many respects, valuable work. It commences with a short anatomical description of the gastro-intestinal canal. The next chapter deals with the subject proper, viz., indigestion: whilst subsequent chapters discuss anæmia and constipation, chiefly from the clinical aspect and as being sequels of indigestion. A final chapter deals with the important question of treatment.

As we have said, this little *brochure* is not intended by its author to rank as a complete treatise on the subject of indigestion; but its aim has been rather to engage the attention of the busy practitioner, who in the midst of a strenuous life has little or no time to consult large volumes on this or that subject according as some patient is giving him anxiety. Such a man will welcome the appearance of Mr. Clarke's work. For although it contains very little that is new or original, the pith and core of each chapter are easily obtained; little points or details in anatomy or physiology probably forgotten, are easily found and referred to, and the all-important chapter on treatment comes conveniently at the end.

One is apt to overlook the value of these smaller works. But one has only to recollect how most of us, at any rate when an important new paper or work is announced, turn to the final chapter to ascertain as it were the "conclusion of the whole matter."

Dr. Clarke's work is distinctly useful, and also helpful. There are some slight errors in anatomical measurements, and some faults in

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[1] From Archibald Constable and Co., Ltd.

[2] "Indigestion, its Causes and Treatment." By Fernandez Clarke, M.R.C.S., L.R.C.P. Pp. 85. Price 2s. London: John Bale, Sons, and Danielsson, 1906.

spelling, and here and there a sentence is not clear in its construction. These, however, do not detract much from a practical and excellent monograph.

GILES ON GYNÆCOLOGICAL DIAGNOSIS.[1]

A BOOK from so well-known an obstetrician as Dr. Arthur Giles is sure to attract attention, and this volume well upholds his reputation. The author points out in an introduction that it is often extremely difficult for students to get much practical experience in the diagnosis of gynæcological cases; for where a surgical or medical case can be examined by many in succession without detriment, not more than two others can make a gynæcological examination in a particular case, and he has therefore written this manual in a manner which will facilitate the diagnosis of these cases, by first presenting the symptoms, and then deducing from them the disease which may be expected. Although this plan leads to repetition in many cases it is a most practical one, as it presents the case to the practitioner in exactly the same manner as if he had a patient before him and had to arrive at a diagnosis. The book is divided into two parts, Part 1 includes chapters on Methods of Examination, The Use of Instruments, The Significance of Symptoms, and The Interpretation of Physical Signs; Part 2 deals with the diagnosis of individual cases by taking the leading symptoms, such as amenorrhœa, pain, discharge, bearing down, or swellings of the abdomen, and tracing the various diseases and complaints with which the symptom is likely to be associated. There are, of course, no directions given for treatment, as the book is written simply as a guide to diagnosis. We have perused this book with pleasure, and strongly recommend it to all young practitioners anxious to increase their knowledge and skill in this department of medicine.

The book is, moreover, well printed, and there are a number of good illustrations.

CLIFFORD ALLBUTT ON PROFESSIONAL EDUCATION.[2]

IT is impossible in a few lines to deal with so long and wide-ranging an address as that which Prof. Clifford Allbutt delivered in part to the students of King's College, and has now published *in extenso*. The booklet is worth reading, not only for the wisdom which it contains, but for the polished literary form in which it is cast. Education is rightly contrasted with instruction, the training of the reason with that of memory, the making to think, rather than to remember and repeat parrot-like. He emphasises the importance

[1] "Gynæcological Diagnosis." By Arthur E. Giles, M.D., B.ScLond., M.R.C.P. Pp. 212, 35 illustrations. Price 7s. 6d. net. London: Ballière, Tindall and Cox, 1906.

[2] "On Professional Education, with Special Reference to Medicine." By T. Clifford Allbutt, M.A., M.D., F.R.S. Pp. 80. Price 2s. net. London: Macmillan and Co., Ltd., 1906.

of a wide general training of the instrument of mind before the turning of it to special departments of knowledge, and regrets that the time of education is so short, and specialisation begins so early. He opposes the view that specialising should begin at school, or even except in a comprehensive way in the universities. The function of university education is not instruction in the special line of a profession or trade, but in expanding and enlarging the mind, and making it a more perfect instrument of knowledge and progress whatever its destination. He regrets the overloading of the medical curricula as if the object was to teach many things ill rather than a few things well. The right way to educate is to teach a few subjects broadly and deeply. He appeals to the students to educate themselves, to recognise the lines upon which their work should proceed, and to follow it patiently. He speaks enthusiastically of the outlook, for never was there a time when the study of medicine offered such visions of reward, social, scientific and beneficent, as at present. Opportunities bring with them responsibilities. If we are to be worthy of our profession we must have high ideals and live up to them.

The booklet is interesting and instructive, and will well repay perusal and thought.

BOX AND McADAM ECCLES ON CLINICAL APPLIED ANATOMY.[1]

THE delightful work of John Hilton on "Rest and Pain," may not be so familiar to the younger generation of the profession, but to the seniors it was a work held in deep affection and veneration. In this new volume the author has endeavoured to follow the lines suggested by Hilton, and in consequence, they have produced a treatise which is altogether different from the modern text-book. Both the authors are well-known anatomists, and so their anatomical facts are beyond dispute, but the feature of the book is to show why various diseases affect certain parts more than others, and why they spread or extend in the direction in which they do. This is all explained on anatomical lines. It is not a book to read before an examination, but to the practitioner it will suggest new ideas of the origin and spread of diseases, and will be read by all with great interest. Much of course, will be familiar knowledge to every practitioner, but the way in which it is written is novel, and it embodies the results of all the latest work on cerebral localisation, and on the various tracts of the spinal cord.

In a book where all is of such excellence, it is difficult to single out any particular chapter, but the chapters on Diseases of the Heart and of the Nervous System, together with those on Peritoneal Suppuration and Surgical diseases of the Abdomen, are especially interesting.

There can be no doubt that Dr. Box and Mr. Eccles are to be heartily congratulated on the result of their labours, and all who read the book will be grateful to the authors for proving to them that systematic anatomy is not dead, and is really still the keynote in the education of the clinician.

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[1] "Clinical Applied Anatomy." By Charles R. Box, M.D., M.R.C.P., and W. McAdam Eccles, M.S., F.R.C.S. London: J. A. Churchill, 1906.

GUERMONPREZ ON THE TREATMENT OF FRACTURES OF THE LIMBS.[1]

THE most striking thing about this book is its size. One wonders how even such an extensive subject as that of fractures can take up 1,644 pages in 8vo, so that it is almost with a sense of relief on opening the ponderous volume that one finds that many of the pages contain but two lines of text with from 12 to 20 words, the rest of the page being devoted to very long foot notes in small type, many of them full of matter having little reference to fractures. The book is a collection of articles or essays by six surgeons who have worked under Mr. Guermonprez. These he has put in order and edited, so that many repetitions go towards swelling the book. But the same spirit runs through the whole of it, and that is decidedly controversial. The author and his collaborators are holding a brief for massage and "*mobilisation*" in the treatment of fractures, and have taken endless trouble to collect everything that has been said on the subject since the time of Hippocrates, and give accounts of almost every discussion they have given rise to. One is not surprised that a book on fractures should attain such a size when, for instance, one finds 15 pages devoted to the correspondence which took place between some surgeons about the results of a fractured femur where damages were claimed. These would be much more in place in a collection of law reports.

Mr. Guermonprez points out the difficulty of reducing fractures at once owing to spasm and effusion of blood, and imitates Hippocrates and Malgaigne in waiting seven or nine, or even eleven days before applying splints. He makes a rule of treating all fractures of the limbs and of the spine by systematic "*mobilisation.*" This he begins on the day of the reduction and the intervals between his sittings vary from two to ten days. This has to be most gentle and must never exceed the "physiological limit." He begins by applying friction to the joint, then an assistant takes hold of the upper part of the limb, the pelvis or shoulder, and steadies it while the surgeon proceeds to move the joint most gently in the different directions indicated. He lays stress on the importance of the surgeon doing this himself, instead of leaving it to a subordinate, as he then has full knowledge of the daily progress of the case. It is the surgeon's business to replace the bandage immediately afterwards to keep the part still.

The book contains some excellent chapters on the methods of putting up the various special fractures. The accounts are most graphic, and are helped by numerous excellent woodcuts. There are special indications for massage and movements for the various joints, and at the end of the book is given a very complete series of pictures of the various apparatus employed, some consisting of most elaborate machinery. This part of the book is very complete and unique in its way. One is even rather surprised to find in it a chapter on breathing exercises, fully illustrated. Any medical man will find all the information he wants on the Swedish exercises, and on Ling's and Zander's methods, on various kinds of stoves and vapour-baths in use. The book is a most comprehensive one and contains an

[1] "Studies on the Treatment of Fractures of the Limbs." By Fr. Guermonprez (of Lille). Edited by J. Rousett. Paris, 1906.

immense amount of very interesting information, and one is repaid for one's trouble even by dipping into some of the footnotes, which all through the book form a sort of under-current, rather distracting at times to the reader. For instance, one long foot note contains part of a lecture on antiseptics by Paul Reclus, and in it one comes across the well known story about Ambrose Paré, which never loses its interest, even if repeated in a book on fractures. After a battle in Italy in 1536, having run short of boiling oil, which used to be poured into the wounds of those picked up on the field, he could not sleep the whole night owing to his anxiety about his patients. Great was his surprise in the morning to find them unusually comfortable and rested. This was a flash of light for a man of genius like Ambrose Paré.

There are also many pages about the history of surgery in the eighteenth century and about the jealousy caused by quacks and empirics. A long and interesting account (50 pages) is given of Bonnet of Lyons, one of the first to advocate "*mobilisation*" in 1837. Of special interest are some of the remarks about Sir James Paget, whose references to bone-setters are freely quoted. His opinions are looked upon as out of date and he is considered not to understand the question, and in fact to treat it with antipathy. Further on in the book one finds that one of the other writers points out that Sir James Paget has had reason to do justice to Dr. Wharton Hood and to admit that some cases of stiff joints can be benefited by the movements which he describes.

We began by saying that it is a big book; there is a great lesson to be learnt in it, contained in an aphorism of Cruveilhier's, *le mouvement c'est la vie:* (movement is life).

Last and not least we hail with pleasure a new feature in a French medical work, one which we shall all welcome, viz.: a copious index at the end.

THE LIBRARY REPORT.

FOUR new volumes have been purchased, namely, Osler's "Medicine," Rose and Carless's "Surgery," Hartridge's "Refraction," and Green's "Pathology"; all being the latest editions. The arrangement with Messrs. Lewis affords an indication as to the popularity of certain books, and on this basis the above purchases were made. Every week recent works are asked for and unfailingly supplied; in fact, as far as the Librarian is aware, there has been no hitch or cause for complaint.

The missing volume of Cheyne and Burgard's "Surgery" has been satisfactorily accounted for.

HERBERT W. CHAMBERS,
Hon. Librarian.

March, 1906.

BOOKS RECEIVED.

Oliver Wendell Holmes and Puerperal Fever. By Chas. J. Cullingworth, M.D., F.R.C.P.

Lectures on Tropical Diseases. By Sir Patrick Manson, K.C.M.G., M.D.

Lectures to Teachers on the Prevention of Infectious Diseases. By William Berry, F.R.C.S.I., D.P.H.
Indigestion. By Fernandez Clarke, M.R.C.S., L.R.C.P.
Bodily Deformities. By E. J. Chance, F.R.C.S.Eng. Edited by John Poland, F.R.C.S. Vol. i. Second Edition.
Electrolysis in the Treatment of Facial and other Blemishes. By J. D. P. McLatchie, M.B., C.M.
The Physiology and Therapeutics of the Harrogate Waters. By William Brain, M.D., M.R.C.P., and Wilfred Edgecombe, M.D., F.R.C.S.
Professional Education, with Special Reference to Medicine. By T. Clifford Allbutt, M.D., F.R.C.S.
Patent Foods and Patent Medicines. Second Edition. By Robert Hutchinson, M.D., F.R.C.P.
Etudes sur le Traitement des Fractures des Membres. By Fr. Guermonprez.
The Animal Parasites of Man. By Max Braun, M.D.
Gynæcological Diagnosis. By Arthur E. Giles, M.D., M.R.C.P.
Visual Function and Health. By George M. Gould, M.D.
The Nauheim Treatment of Heart Disease. By Leslie Thorne-Thorne, M.D.
St. Thomas' Hospital Reports.
Clinical Applied Anatomy. By Charles R. Box, M.D., M.R.C.P., and W. McAdam Eccles, M.S., F.R.C.S.

BARNSBY (*La Gynécologie*, December, 1905) recently reported the following case to the French Surgical Association: In a woman, aged 38, in whom when pregnant several years previously a cyst of the ovary had been detected, torsion of the pedicle occurred, and the cyst suddenly increased in size with severe peritoneal symptoms. Nevertheless the patient would not then consent to an operation, and eight weeks later Barnsby had to perform an urgent operation upon her in a state of exhaustion the day after the spontaneous perforation of the cyst into the bladder. In the course of the operation the tumour was found to be everywhere adherent; it burst and proved to be a suppurating dermoid communicating with the bladder. The appendix, of which the lower third, bent and obliterated, contained pus, was adherent to the wall of the cyst. There was also a large uterine fibroid and hydrosalpinx on the left side. The cyst and the appendix were removed, the breach in the bladder stitched up and a supravaginal hysterectomy performed, leaving the left ovary intact. The recovery was uninterrupted and complete.

POST-GRADUATE COLLEGE.

By the Dean.

The Second Winter Session commenced on Monday, January 8. It has been well attended, as many as 94 Post-Graduates having attended during the Session. Amongst these were 18 Officers of the Royal Naval Medical Service, 8 of the Royal Army Medical Corps, 6 of the Indian Medical Service, and 20 from the Colonies and abroad. The number of Life Members is now 68.

During the Session several special classes have been held in the following subjects: Ophthalmology, Practical Administration of Anæsthetics, Tutorial Class in Medicine, Examination of Throat, Nose and Ear, Intestinal Anastomoses, Skiagraphy, Bacteriology, Clinical Examination of Blood and Urine, Operative Surgery on the Dead Body, Gynæcology, and Tropical Medicine.

We have to congratulate Dr. A. H. Gerrard on having obtained the Gold Medal in his examination for the M.D. London. Also Messrs. Scott-Williams, Frank Forrest, and W. H. Gillat, in obtaining commissions in the Royal Army Medical Corps, and Mr. Harry Hutchison in the Indian Medical Service, and Mr. Ewen Cameron in the Royal Navy.

The Medical Staff of the Post-Graduate College gave a Conversazione to the members of the College and their friends on the evening of Wednesday, March 14. Guests on arriving were received by the members of the College Committee, in consequence of the illness of His Grace the Duke of Abercorn, K.G. There was a very large attendance and the evening was a great success.

The London Concert Quartette directed by Mr. Algernon Clarke, performed a selection of music during the evening in the out-patient room, varied at intervals by a superb display of animated photographs, and a very amusing series of sketches in chalk on the blackboard, by Mr. Percy French.

Exhibitions were given in the Consulting Rooms.

Nos. 1 and 2 Consulting Rooms were occupied by an Exhibition of Pathological Specimens, Microscopic Sections, Apparatus, &c., from the Pathological Laboratory, by Dr. Hamilton Wright, Pathologist and Bacteriologist to the Hospital.

In No. 3 Consulting Room there were Surgical Instruments, by Messrs. Hodgkinson, and Mayer and Meltzer. Pharmaceutical Preparations, by Messrs. Burroughs, Wellcome and Co., and The Plasmon Co.

In No. 4 Consulting Room, Surgical Instruments by Messrs. Arnold and Sons. Pharmaceutical Preparations by

Messrs. Oppenheimer, Son and Co., Ltd., and Mr. W. Martindale, and Optical Appliances and Apparatus by Mr. F. Davidson.

In No. 5 Consulting Room, Demonstrations in Electricity. The Hospital New X-ray Apparatus. New West London Hospital X-ray Table. Wimshurst 12 Plate Machine. High Frequency Machines. Skiagrams, by David Arthur, Esq., M.D., and Chisholm Williams, Esq., F.R.C.S., Electro-therapeutists to the Hospital.

Refreshments were provided in the College throughout the evening, and the Pathological Laboratory, adjoining the Lecture Room, was open for inspection of visitors.

Altogether a most enjoyable evening was spent.

The following is a List of Life Members and of Post-graduates who have attended the practice of the West London Hospital for the past three months. An asterisk is placed against the names of those who are Life Members.

H. Ackroyd (Caius Coll, Cambridge).
*L. H. Armstrong (Ripon).
*D. Arthur (Ealing).
*G. J. Bagram (Bayswater).
*A. Baldock (Earl's Court).
J. C. Balsara (Bombay).
*W. E. Barton (Streatham).
Allen A. Bath (London).
Benjamin Baty (Carlisle).
Major F. W. Begbie, R.A.M.C.
*A. G. Beale (Kensal Rise).
Captain V. B. Bennett, I.M.S.
*Dep. Ins.-Gen. R. Bentham, R.N.
Staff-Surgeon G. T. Bishop, R.N.
Captain E. W. Bliss, R.A.M.C.
Fleet Surgeon G. G. Borrett, R.N.
W. Bridgeford (Boulder, W. Australia).
*R. D. Brinton (S. Kensington).
*H F. Browne (Langham Street).
*W. M. Burgess (Harlesden).
Surgeon Ewen Cameron, R.N.
*Capt. Carmody, R.A.M.C. (ret).
*Major E. R. W. Carroll, I.M.S.
P. Carroll (Cork).
Robert Carter (British Guiana).
H. W. Chambers (Hon. Member, Shepherd's Bush).
*Col. Clutterbuck (Bayswater).
Fleet-Surgeon W. J. Colborn, R.N.
Major J. C. Connor, R.A.M.C.
James Cook (Queensland).
Martin A. Cooke (Ealing).
*E. J. Coulson (Fulham).
Fleet-Surgeon J. E. Coad, R.N.
James Chute (Camp, co. Kerry).
James Craig (Londonderry).
H. Evelyn Crook (Twickenham).
H. V. Crossfield (Sydney).
*J. S. Curgenven (Bayswater).
Surgeon A. La Touche Darey, R.N.
Staff-Surgeon L. E. Dartnell, R.N.
G. G. Davidson (West Kensington).
F. S. Dawe (Chiswick).
Surgeon R. Dickinson, R.N.
*L. Dobson (Kensington).
W. Barclay Dick (Ealing).
W. McD. Ellis (Bath).
G. W. Emlyn (Bayswater).
S. K. Engineer (Bombay).
*A. St. Aubyn Farrer (Paddington).
F. O'D. Fawcett (Dalkey, co. Dublin).
Capt. R. F. R. Fawcett, R.A.M.C.
*W. H. Fitzmaurice (Dunmanway).
A. Ross Fraser (Uitenhage).
*Fleet-Surgeon A. M. French, R.N. (ret.).
W. E. Fry (Hammersmith).
*M. N. Gandevia (Ceylon).
*F. Gans (West Kensington).
*H. M. Gay (Southampton).
*D. Gault (New Zealand).
A. H. Gerrard (Chiswick).
*A. J. Giant (West Kensington).
*W. Grantham-Hill (Chiswick).
J. K. Grimmer (Hounslow).

*C. H. Haines (Kensington).
A. R. Hall (Kensington).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
*A. Harrison (Yeovil).
H. F. Harvey (Perth, W.A.)
*N. Heard (Kensington).
E. W. Hedley (Westminster).
Guy Hollings (Euston).
T. E. Honey, Fleet-Surgeon, R.N. (ret.).
Staff-Surgeon W. K. Hopkins, R.N.
Capt. J. H. Hugo, D.S.O., I.M.S.
H. Lyons Hunt (London, Canada).
*W. C. James (Kensington).
*Capt. R. C. Johnson, R.A.M.C.
Deputy Ins. Con., A. J. Johnston, R.N.
T. S. Kerr (Singapore).
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (West Kensington).
*Alex. Krakowski (West Kensington).
J. Ward Lawson (Westminster).
C. A. Lees (West Ealing).
*T. M. Legge (Temple).
*T. Ligertwood (Chelsea).
Capt. C. H. Lincoln, I.M.S.
Staff-Surgeon F. D. Lumley, R.N.
*J. Lynes (Kensington).
*A. B. Lyon (Hammersmith).
*Norman MacDonald (Harlesden).
Capt. Stuart J. McAllum, R.A.M.C. (M.).
*E. D. Macdougal (Walton-on-Thames).
*J. B. Mackay (Newport, I.W.)
Surgeon F. J. McKenna, R.N.
*H. McNickle (Vauxhall).
*G. Maguire (Kew).
*D. F. Maunsell (S. Kensington).
A. W. May (Rhodesia).
Staff-Surgeon E. T. Meagher, R.N.
A. G. Meares (Melbourne).
H. T. N. Merrick (West Kensington).
Jose Mondino (Monte Video).
Aubrey Montague (Fiji).
Major G. T. Mould, I.M.S.
*B. W. Mudd (Stirrington).
Wm. Murray (London).
James Myles (Wandsworth Common).
*W. Nolan (Bayswater).
*W. Norbury (London).
*W. R. Olver (New South Wales).
Surgeon R. S. Osborne, R.N.
*H. M. Page (Kensington).
H. Compton Parsons (Devon).
W. Harland Peake (Hampstead).
*A. F. Penny (Chelsea).
Douglas R. Pike (Kensington).
*R. D. Pollock (Acton).
W. H. Randolph (Richmond, Virginia).
*A. Renny (Southampton).
*A. H. Rideal (Twickenham).
A. L. Ritchie (Darfield).
*Patrick Robertson (Canada).
*A. Tait Robinson (Portman Square).
*Neil Robson (Sittingbourne).
*F. E. Rock (Hammersmith).
T. Mackay Ross (Fulham).
Capt. N. J. C. Rutherford, R.A.M.C.
J. Searson (London).
*Lt.-Col. A. Silcock, I.M.S.
A. Malcolm Simpson (Ayr).
*G. A. Garry Simpson (Ayr).
*A. Ross Sinclair (Parson's Green).
*W. Slater (Wanstead).
Major H. Austen Smith, I.M.S.
Staff-Surgeon R. W. Stanistreet, R.N.
A. E. Stevens (Chelsea).
Surgeon W. J. Stitt, R.N.
*H. H. Sturge (Maida Vale).
Staff-Surgeon E. Sutton, R.N.
*E. Swain (Hampton Hill).
Capt. T. H. Symons, I.M.S.
John Tatt (Aberdeen).
C. Thackray (St. Pancras).
Surgeon J. Thornhill, R.N.
Capt. L. G. C. Thorpe, R.A.M.C.
J. Lowes Timmins (Acton).
E. F. Travers (Kensington).
Trench, F. P. (St. James).
J. A. Trowbridge (Kansas).
W. C. Trowbridge (Kansas).
F. Douglas Turner (Colchester).
Vallency, A. de (Hammersmith).
*L. A. Walker (Lee-on-Solent).
R. Miln Walker (Bournemouth).
Jas. Wallace (Acton).
*H. W. Walter (Brentford).
*J. Williamson (Putney).
R. Wilkins (Preston).
C. E. A. Wilson (London).
J. H. Wolfe (Hanwell).
*A. P. Woodforde (Shepherd's Bush).
Oswald S. Wraith (Darwen).

THE ANNUAL DINNER.

THE Annual Dinner of the West London Medico-Chirurgical Society, was held at the Wharnecliffe rooms, Hotel Great Central, on Wednesday evening, February 7, Mr. L. A. Bidwell being in the Chair. There were present 157 members and guests, among the latter being included the Presidents of the Medical Society, the Harveian Society, the Chelsea Medical Society, the South-West London Medical Society, the West Kent Medical Society, and the Director-General of the Army Medical Service. After the loyal toasts of the King and Queen and the Royal Family had been proposed by the President, and duly honoured, the toast of the Imperial Forces was proposed in a thoughtful speech by Mr. John Pardoe. He referred to the fact that by many in high authority, notably Lord Roberts, recent statements had been made to the effect that our present army was not adequate to our needs, and that whatever might be thought with regard to the combatant arm of the service, this was certainly true of the medical arm, and this state of matters was likely to continue to be the case unless civilian doctors took their proper share in the work which would have to be performed in the event of war. The Society was to be congratulated on the fact that one of its founders and present members, Mr. Keetley, had been the first to initiate a scheme for the formation of an Army Medical Civilian Reserve, with the object of training civilian surgeons in at least some of the duties which would fall to them in the event of a foreign war. He referred in fitting terms to the well-known energy, capacity and efficiency of the present Director-General of the Army Medical Service, who was taking a real personal interest in the scheme which had been outlined.

In replying to this toast the Director-General, Surgeon-General Keogh, said: That the numerical insufficiency of the Royal Army Medical Corps for the strain which would be put upon it in the event of a great war, was a constant source of anxiety to him, and so much had this been the case in the past that a year or two back in a speech he then made at this dinner, he had almost ventured to censure the civilian medical profession for the very scanty interest they seemed to take in the matter. After this speech Mr. Keetley came to him and said that he had been much impressed by what he had just heard, and would like to know what it would be possible to do in the matter. Out of this conversation had come the movement to which Mr. Pardoe had referred. What was the

problem? It was necessary during war time that the medical arm of the service should be capable of great expansion, but in view of the fact that the duties that have to be done by an army doctor are in many ways special to the service, they could not be taken up at once by civilians without some previous training; for it included many duties, both administrative and technical, to which the civilian population in our country were strangers; this, however, was not the case on the continent, where military service is universal. The West London Medico-Chirurgical Society was to be congratulated that under its auspices, and by the foresight of Mr. Keetley, a movement had been initiated for at least the partial remedy of the present state of matters. A course of lectures and demonstrations by capable army medical officers, was now being given at the West London Hospital, on Saturday afternoons, to a considerable number of medical men, with the view to instructing them in the work which would fall to them should the major part of the Royal Army Medical Corps be called abroad, as would certainly be the case in the outbreak of war. From this small beginning it was to be hoped that the movement might spread so that a large Army Medical Civilian Reserve would be gradually built up, ready at a moment's notice to take up efficiently and patriotically the care of the home army, which in war time always undergoes rapid expansion, due to the great increase of recruiting.

Sir LAUDER BRUNTON then proposed the toast of the "West London Medico-Chirurgical Society," and said that it was hard to estimate the good that was done by the various London medical societies, and particularly by this Society, which is one of the largest, numbering between 600 and 700 members. He recalled the fact that the Society had recently lost one of its founders, Dr. Campbell Pope, and in remembering this, he was reminded of the fact that among other distinguished members who were no longer with us were such men as Mickulicz, Milner, Fothergill and Burdon Sanderson. A rapid and graphic sketch of the rise and progress of antiseptic, and then of aseptic, surgery led to an eulogy of the present President of the Society, whose knowledge, capacity, energy and urbanity were well known.

Mr. BIDWELL, in replying to this toast, said that the Society was greatly honoured by having as a guest the President of the oldest medical society in London in the person of Sir Lauder Brunton. The Society had been founded in 1882, largely by the energy of Mr. Keetley, and soon reached a membership of 115; in 1895 when he was secretary, the membership had increased to 315; it was now about 650. The Society was a progressive one, and this was clearly

shown by the last ordinary meeting, which had, at the instance of Dr. Andrew Elliot, been for the first time devoted to Pathology, with the result that about eighty members and visitors had been present, and a most instructive evening spent. The Journal was a most important adjunct to the Society's usefulness. It was started some ten years ago by Dr. Symonds Eccles; it had flourished greatly under the able control of Mr. Dunn and Mr. McAdam Eccles, and continued to do so in the hands of Dr. Dobson and Mr. Pardoe. There was also a library connected with the Society under the management of Mr. Chambers. The reason why the Society flourished was, he believed, because it was founded on right lines, and was very largely in the hands of general practitioners, who took an active interest in its work.

Mr. BIDWELL then proposed the toast of the "Visitors," which was responded to by Dr. F. W. Cock (President of the Harveian Society), who referred to the intimate relations that had obtained between himself and many members of the Society in the past. Mr. G. F. Marshall (Chairman of the West London Hospital House Committee), replied for the non-medical guests, and spoke of the advantages which accrued to the hospital by the association with it of such a Society as this.

The proceedings of the evening were much enlivened by the music of a small stringed orchestra, provided by the London Concert Orchestra, and by the wonderful sleight of hand performances of Mr. Charles Bertram.

THE interesting discovery has been made by Dr. Causson (and published in the *Répertoire de Pharmacie* of February 10) that methyl iodide is a more powerful vesicant than cantharides. It is, moreover, a cleaner preparation than the cantharides preparation and has the further advantage of exerting no action on the urinary organs. The use of methyl iodide is indicated in place of cantharides in all cases, especially when an energetic vesicant is required. In applying methyl iodide for this purpose from 15 to 30 grains of the liquid, the quantity depending on the area to be blistered, are poured upon a double fold of bibulous paper cut to the desired size. The paper is then applied to the skin which has previously been well washed with soap. Over this is placed a piece of gummed taffeta *(taffetas gommé)* a little larger than the paper, and lastly a layer of cotton-wool moistened at the edges with collodion to keep the epidermis in position. The dressing may be removed at the end of two or three hours or it may be retained in position for from sixteen to twenty-four hours. Blisters appear from three to eighteen hours after the application of the dressing and resemble those produced by cantharides.

NOTES ON NEW PREPARATIONS, &c.

Messrs. E. J. Reid and Co., Dunedin House, Basinghall Avenue, E.C., have forwarded for our trial specimens of Andouard's Beef Powder and a fluid Saccharated Protoxide of Iron, to which the name "Isson" is applied.

The beef powder is stated to be the finest procurable beef, desiccated by a special process invented by Professor Andouard, of Nantes.

The specimens submitted to us showed a grey powder with a meaty odour and a pleasant taste, only partially soluble in water.

Professor Andouard gives the following analysis :—

Proteid	78 to 80 per cent.
Fat	8 per cent.
Mineral salts	4 per cent.
Water	8 to 10 per cent.

Added to ordinary beef-tea it imparted an agreeable flavour, and was relished by the patients to whom it was administered. It is an agreeable addition to the many concentrated proteid foods at present before the medical profession, and in our opinion deserves as wide a trial in this country as it has already received in France, where it is largely prescribed and used.

The Saccharated Protoxide of Iron sent to us by the same firm is pleasant in taste, does not blacken the teeth, and does not cause constipation. The dose is for adults 30 to 60 drops taken three times a day, after food.

Messrs. J. S. Fry and Sons, Bristol.—The **Milk Chocolate** supplied by this firm is not only a very pleasant sweet-meat, but is also an excellent article of food. In typhoid fever, dysentery, &c., it forms a grateful addition to a milk diet. It is guaranteed to be a combination of pure cocoa with the finest sweetened milk, delicately flavoured with vanilla, &c.

Fry's Malted Cocoa is a combination of Fry's pure cocoa extract with Allen and Hanbury's concentrated Extract of Malt. It is dried at a gentle heat to avoid injury to the diastase, and forms an exceedingly palatable and nourishing food and beverage. It requires no boiling; the best way to prepare it being to mix it with a little cold milk into a smooth paste and then fill up with hot water, adding cream and sugar to taste.

Messrs. Burroughs, Wellcome and Co., Snow Hill, E.C.—This firm has forwarded to us another addition to their list of "Enules," or special suppositories.

"Enules" Gall and Opium contain Extract of Opium gr. ¼ and Tannic Acid gr. iii. in each. They are of the improved shape familiar to our readers, by which insertion is facilitated and expulsion rendered difficult. Each is enclosed in a protective covering of pure tin-foil which is easily stripped off just before use.

"Enules" Gall and Opium are issued in boxes of 1 dozen.

Messrs. Hedley and Co., 92, Harrow Road, Leytonstone, request us to inform our readers that their "Ethyl Chloride" was not the preparation used in a recent fatal case which received considerable attention in the daily press. We have pleasure in making this statement public, as we have seen Hedley's Ethyl Chloride used on many occasions, giving an excellent anæsthesia. Fatalities occur with almost any anæsthetic, however, and the fatal result in the case above referred to is probably no reflection whatever upon the particular brand of Ethyl Chloride used.

Messrs. Oppenheimer, Son, and Co., Ltd., 179, Queen Victoria Street, E.C., ask us to state that they have been favoured by the African Lakes Corporation, Ltd., with the exclusive handling of the *Strophanthus Kombe* seeds shipped by them from Africa. They have arranged that the seeds shall be collected under the supervision of skilled botanists, so that their identity shall be guaranteed as genuine.

In the case of so important and toxic a drug as Strophanthus such a precaution appears to be highly desirable.

We have received from **Messrs. Parke, Davis and Co.** the following :—

Acetozone (Benzoyle-acetyl-peroxide).—The solution of acetozone is powerfully germicidal, yet non-toxic, and practically harmless to animal tissues.

The 1 : 1,000 aqueous solution is remarkably successful in typhoid fever, rapidly diminishing its distressing symptoms. This strength is also given in ptomaine poisoning, and used as a lotion in erysipelas, ringworm, &c.

The 1 : 2,000 aqueous solution is given in dysentery, diarrhœa and cholera infantum, and used as a collyrium in corneal infection.

A 1 : 3,500 aqueous solution is given in intestinal fermentation, used as an injection in gonorrhœa, puerperal fever, &c., and employed in cystitis, in the irrigation of abscesses and dressing of wounds. Acetozone mixed with 50 to 1,000 parts of zinc oxide, starch powder, &c., is admirably adapted as a dusting powder.

Acetozone Inhalant.—A solution of acetozone (1 per cent.) and chloretone (0·5 per cent.) in liquid paraffin. Valuable in all infectious or bacterial diseases of the nose, mouth, ear or throat, also in bronchitis and other inflammatory conditions of mucous membrane accessible by spray. It is practically non-irritating.

Thyroidectin.—A powder prepared from the blood of animals which have been deprived of the thyroid gland. It was assumed that by such means thyroidism could be neutralised, and clinical tests have corroborated the theory. In the treatment of Graves' disease (exophthalmic goitre) marked improvement has almost invariably been observed. Thyroidectin is non-toxic, and appears to be well borne by the stomach. It is supplied in capsules of 5 grains each, the dose being from 5 to 10 grains.

Scopolamine and Morphine Hypodermic Tablets.—Each contains $\frac{1}{64}$ grain Scopolamine Hydrobromide and $\frac{1}{8}$ grain Morphine Hydrochloride. This combination is recommended by Korff (*Berliner Klinische Wochenschrift*), for the production of general anæsthesia, or as an aid to ether or chloroform, which, if used at all, are needed in much less quantities than usual. One-third part of a freshly prepared solution of one of these tablets is injected two and a-half, one and a-half and half hour before operating. Specially useful where ether or chloroform is contra-indicated. Reports state that salivation is not excited, that liability to nausea is lessened, and quiet and freedom from pain after operation are secured.

Throat, Mentholated (Modified) Compressed Tablet 427.—Each contains Menthol $\frac{1}{35}$ grain, Benzoic Acid $\frac{1}{12}$ grain, oil of Anise $\frac{1}{80}$ minim, and Eucalyptol $\frac{1}{16}$ minim. One tablet allowed to dissolve in the mouth occasionally is very useful in inflammation of the throat and bronchi, allaying cough and facilitating expectoration.

The Electro-Neurotone Co., Ltd., 186, Goldhawk Road, W.—One of the instruments supplied by this Company has been forwarded to us for trial, and we have been lately using it for various cases in which a gentle faradic current might be expected to be useful, with great success.

The special feature of these instruments lies in the two metallic plates which line the under surface, insulated from each other, across which the discharge of the current takes place, thus doing away with the use of sponges and electrodes, and making it much more handy for use. The instrument is in the form of a small flat-iron made of vulcanite, on which is mounted a coil wound with fine wire in such a manner that the frequency of the interruptions is very great. The intensity

of the current is regulated by a small, movable switch, and as before stated the coil is connected to two metal plates, mounted on the under surface of the instrument, which are brought into contact with the skin. The neurotone is supplied with current from a dry battery, thus rendering the whole apparatus very portable. It can be applied to any part of the body with the greatest ease, and there is practically nothing which can get out of order. It is surprising with what ease the current can be regulated.

We can from experience cordially recommend these instruments to those requiring a well made apparatus of moderate price and with little or no liability to get out of order and be found wanting just when required. Mr. Hodgkinson, the Managing Director of the Company, is always glad to see members of the profession at his office and explain the working of the instruments. We may add that the Company always have a stall at the Annual Conversazione, where professional men can see and try personally the various forms of apparatus supplied.

X-RAYS AND THE THYROID GLAND.—While treating a woman, aged 52, for carcinomatous glands with the X-rays, Stegman (*Med. Electrol. and Radiol.*, 1905) noticed that a large parenchymatous goitre, which was in the area rayed, decreased in size, losing one-quarter of its bulk in six treatments; the clavicular glands were also found to have disappeared as far as palpation was concerned. He then tried a large, soft parenchymatous goitre in a girl, aged 21, and found that after two exposures only the circumference of the neck had decreased from 39·8 centimetres to 36, and the dyspnœa was relieved.

As a means of preventing the lamentable interference with the education of children affected by tinea tonsurans, David Walsh (*Med. Brief*, 1905) suggests the following treatment.

The scalp is shaved, rubbed over with turpentine, washed with soap and water, and then painted with a germicide, such as weak formalin. A 10 per cent. solution of ac. salicyl. in collodion is then applied and repeated every second or third day, or sooner if there is any tendency to crack. After a week or ten days the collodion film is forced up by the growth of the hair. The collodion is then stripped off and the hairs come with it, diseased and healthy alike. In this way spread of the disease is prevented, the treatment is shortened, education is not interfered with, a cure can be looked for by systematic and recurrent removal of the hair: the treatment is practically limited to shaving and refilming the scalp every week or ten days, and in addition, if required, the X-rays can cautiously be used through the film.

NOTES AND NEWS.

The above is a facsimile of a handsome gold and enamel badge which has been presented to the Society for the use of its Presidents by Mr. Leonard Bidwell, our present President. It is suspended by a dark blue coloured ribbon, and will be worn at all meetings of the Society. We feel sure that we record the feelings of all our members when we express to Mr. Bidwell our admiration of the handsome badge, and our thanks to him for his tasteful act of generosity.

The Cavendish Lecture will be given by Sir Wm. MacEwen on Friday, June 8. This as usual will be followed by a Conversazione given by the President and Members of the Council. The date is an earlier one than usual and has been chosen to suit the convenience of the Cavendish Lecturer.

The Council has decided on a most important step in changing the place of meeting for the Cavendish Lecture and Conversazione from the Hammersmith to the Kensington Town Hall, and it rests with the members whether the the experiment shall be a success or not. As we stated last year, the number of our advertisers had increased to such an extent that the capacity of the Hammersmith Town Hall was taxed to its uttermost to provide room for all those who wished to exhibit at the Conversazione. This year our

Editorial Secretary, Mr. Pardoe, found it impossible to provide sufficient space for all, and after a long discussion it was finally decided to remove the meeting to the Kensington Town Hall. Here the accommodation is far superior, for not only is the hall much larger, but we shall have in addition a better lecture room, another large room for exhibits, and a most commodious lounge at the head of the staircase. The Kensington Town Hall is most centrally situated, nearly opposite Kensington High Street Station on the District and Metropolitan Railways, and on the route of several lines of omnibuses coming from Piccadilly and Hammersmith. We sincerely hope that members will recognise the enterprise of the Council in attempting to make the Annual Conversazione a still greater success, and by attending in large numbers help to establish yet another record during Mr. Bidwell's Presidency.

THIS Session under the Presidency of Mr. Bidwell promises to be a notable one. Already we have secured two records in the attendances, at the Pathological Meeting held in February, and at the Annual Dinner.

THE Pathological Meeting was the outcome of a suggestion of Dr. G. Elliot to take the place of the Annual Discussion. Exhibits of all sorts, spirit specimens, microscopic slides,

lantern slides and X-ray photographs were invited and exhibited, and the result was a collection of surprising interest. The attendance was excellent, as there were some eighty-seven members and friends present, and the accommodation of the room was taxed to the uttermost. We do not remember in the course of our experience to have seen such a large gathering of the Society at any ordinary meeting.

THE Annual Dinner which took place on Wednesday, February 7, at the Wharncliffe Rooms of the Great Central Hotel was also a record in numbers, about 160 members and guests sitting down to a most enjoyable dinner, a description of which is given elsewhere.

AFTER fifteen years' service with the West London Hospital, for the last five of which he has been Surgeon to Out-patients, the Committee have appointed Mr. Leonard Bidwell Surgeon to the Hospital. We congratulate our President on his election, which he most assuredly has deserved, not only for the long time he has spent in the service of the Hospital, but also for the success of the Post-Graduate College, which every one will admit is largely due to his exertions on its behalf.

MR. H. CHAMBERS, the Hon. Secretary, has forwarded to us the following notes on the Army Medical Civilian Reserve. A series of lectures, announced in the last issue of the Society's Journal as about to take place, was inaugurated by Surgeon-General Keogh, Director General of the Army Medical Services, at the West London Hospital on January 20. This paper may be strongly recommended for perusal to any one who is interested in the subject. It shows the advancement in technique and status of the Royal Army Medical Corps as well as its efficiency to take the field at the shortest notice, and further presents a *raison d'être* for the existence of auxiliary aid by the establishment of a Civil Reserve such as is now undertaken of some members of this Society. The attendance numbered fifty-three, and was thoroughly representative of both consultant and practitioner.

The first lecture of actual instruction was given by Colonel James, R.A.M.C., on February 3, the attendance being forty-three, and the subject, the "Constitution of the Army, its Government and Staff; duties of the Army Medical Service and its relation to other branches."

The second lecture was given by the same officer on February 17, on the "Organisation of the Army Medical Service for Peace." Again the attendance was most satisfactory, being forty.

This address demonstrated very clearly the great difference

existing between the management of a Military and a Civil Hospital, discipline and responsibility playing an important *role*, and that an officer, no matter what rank he may hold, must always subordinate his individuality to the authority above him.

The third lecture was given by Colonel Macpherson on March 3, upon the "Organisation of the Army Medical Service for War," the attendance on this occasion being upwards of fifty. The fundamental difference between a "Peace" and "War footing" was very ably shown, and the composition of a field army with its units and lines of communication clearly defined. This lecture was illustrated by lantern slides taken during the recent Japanese war by Colonel Macpherson, who accompanied the victorious army for many months.

Facilities have been afforded the class of acquiring practical instruction in the duties of a medical officer by visits to the Royal Herbert Hospital at Woolwich and to the special Venereal Hospital in Rochester Row. At the former institution the routine of inspection, admission, warding and discharge of a sick soldier was demonstrated. The visitors were shown the system of keeping the many records and statistics associated with the service, as well as diet, clothing, &c.

At the latter hospital the injection treatment of syphilis was shown and the mode of record by a history sheet accompanying each soldier, thus enabling the after-manifestation of this protean disease to be clearly diagnosed and continuous treatment insured.

The course of instruction so far has been a distinct success and a great encouragement to those who have helped to promote its organisation.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 71, Holland Park Avenue, W.; those concerning business matters, advertisements, non-delivery of the Journal, &c., should be addressed to the Editorial Secretary, 77, Wimpole Street, W.

Authors desiring reprints of their articles published in the WEST LONDON MEDICAL JOURNAL are requested to communicate with the Editorial Secretary, 77, Wimpole Street, W. Reprints can be obtained at the following prices, if ordered before the publication of the Journal:—

	Pp. 1-4	Pp. 4-8	Pp. 8-16
50 copies	6/-	9/-	12/6
100 copies	7/6	12/-	16/-
200 copies	10/6	16/-	25/-

Special rates are quoted for longer reprints.

We wish to remind members that our columns are always open to them if they will forward to us papers which may be published as original communications, or interesting cases for the "Mirror of Practice." General practitioners, as well as specialists, are constantly meeting with cases of exceptional interest to all of us, and we shall always be pleased to publish them, if they will send them at least a month before publication.

THE

West London Medical Journal.

Published Quarterly under the auspices of the West London Medico-Chirurgical Society.

Original Communication.

THE CAVENDISH LECTURE ON SOME POINTS ON THE SURGERY OF THE LUNG.

By Sir WILLIAM MACEWEN, F.R.S.

MR. PRESIDENT AND GENTLEMEN,—When invited to deliver the Cavendish Lecture, I perceived among the honoured names comprising the list of previous Cavendish Lecturers that the penultimate one was that of my old friend, Professor Mickulicz. It recalled the fact that, at what proved to be our last meeting, after busy days passed at his magnificent Klinik at Breslau, we were spending a quiet Sunday among the Riesen Gebirge, when he told me he had been asked to deliver the Cavendish Lecture. He foreshadowed its subject and was looking forward to the London meeting with evident pleasure—partly from the love of his work, and partly because he perceived in the invitation an extension of international courtesy which he highly appreciated. As I had known Mickulicz since meeting him in Bilroth's Klinik in Vienna, where he acted as second assistant, and subsequently in the many surgical positions he held throughout life, perhaps I may be allowed to say that I have ever admired the ceaseless and untiring energy with which he pursued the culture of surgery, and thereby so greatly contributed to the advancement of its science and its art.

In giving the subject of this lecture as "Some Points on

the Surgery of the Lung," I had hoped to be able to place before you a series of observations on the physical, physiological and pathological phenomena met with in dealing with human lungs and their pleuræ, and also to have contributed a series of cases illustrative of the modern aspects of lung surgery. It became apparent, however, that within the limited time at my disposal to-night, it was impossible to undertake both. Hence it has been considered expedient to confine attention principally to the former.

The admission of air to the pleura and its results has been, and according to some authors is still considered, the greatest barrier to the surgery of the lung. Thus we have an excellent surgeon and experimentalist stating in a recent paper that "the pleuræ do not remain in contact when air is admitted into the pleural cavity, *even by a pin-hole opening*," and that "when openings large enough to admit the hand are made into the pleuræ, the lung, in two or three expirations, collapses to its hilum and remains there stationary, without the slightest effort at expansion." Having been taught that the lung always collapsed on opening the pleural cavity when there were no organic adhesions present, the phenomena presented by some cases which came under my observation in the early 'seventies caused me to consider the question and to doubt that collapse of the lung was always so absolute as it was supposed to be. Enquiry was also made as to whether there were modifying circumstances which could avert that collapse, or others which could rectify it when it did occur.

Observations from Wounds Opening the Pleural Cavity.

One of these cases was that of a man who lived only for a short time, having been terribly injured by falling over a circular saw in motion. Besides receiving other mutilations, he had a slice taken off the outer aspect of the right side of his chest in a vertical direction, so as to form a flap consisting of soft tissues, ribs (which were cut as if by a keen-edged knife), and part of the parietal layer of the pleura. The visceral pleural layer was left exposed over an area as large as the palm of my hand. When first seen the patient lay on his back, and, though extremely weak and blanched from

loss of blood, he breathed quite easily, and not like one who had collapse of the lung. After his other serious injuries had been attended to, the thoracic wound was examined. There was a mass of blood-clot protruding from and filling up the thoracic wound which precluded visual inspection of the deeper parts, but so easily did he breathe that the deflected flap of tissue was again inspected to verify the previous observation that the parietal pleura was really attached to it. Being fully satisfied on this point it was apparent that the visceral layer must be exposed, yet there were no signs of pneumothorax. As bleeding still continued under the clot, it became necessary to remove it and ligature the vessels in the thoracic wall. The clot was carefully removed, first from the centre, until the visceral layer of the pleura was exposed. It was then seen that the lung was fully expanded, and that the pleural cavity was as yet sealed at the periphery of the thoracic wound. There, however, the exposed portion of the lung lay in contact with the atmospheric air, and there was no collapse. One of the intercostal vessels which was still oozing had receded somewhat under the margin of the parietal wound, and during the manipulation necessary to secure it—the blood-clot having been removed from the periphery of the wound—the two layers of the pleura were separated and air was admitted into the pleural sac. The lung receded from the thoracic wall, but only for a short distance, sufficient to enable the finger to be introduced. The bleeding vessel having been secured, the osteoplastic flap was cleansed and it was applied over the wound to see how it fitted. This was done with some pressure. When the flap was about to be removed for readjustment, it was found to have coalesced to the underlying parts, so as to offer considerable resistance to direct lifting. It was, however, easily slid aside, and when the wound was uncovered the lung was seen to have again expanded, the two serous layers having coalesced. Apparently the moist soft flap, during the pressure of its adjustment, had been pressed in along with the whole thoracic wall, until its parietal pleural layer had come in contact with the visceral layer. On relief of the pressure the flap had lifted the lung forward and outward, the coalescence of the two pleural layers remaining and the lung filling the aperture in the

chest wall, as it did prior to the admission of air into the pleural sac.

The portion of lung still exposed by the wound was in contact with the chest wall while the patient lay on his back, but, on the patient tossing suddenly round on his opposite side, the air again entered the pleural sac and the lung receded markedly from the thoracic wall. When turned gently on to his back and pressure was made at the same time on his thorax, the two pleural layers were again brought into contact. The wound was at once closed with the flap, pressure being meanwhile applied to the thorax, and the external parts were suitably fixed to prevent undue expansion of the thorax on that side. His breathing became again quite easy.

From the observation of this case, it appeared probable that there were modifying circumstances which might prevent the collapse of the lung when air was admitted between the two pleural surfaces. Should collapse of the lung occur, to a limited extent, that organ could be expanded again by the simple expedient of bringing together the two layers of the pleura and securing intimate contact between them. Even by putting a suitable moist substance in the gap in the chest wall and bringing it into intimate contact with the collapsed lung, coalescence between the two surfaces was sufficient to bring the lung into its expanded state.

The question arose as to whether the lung in a physiological state could not always be expanded after temporary collapse, as long as the two serous layers were normal and the chest wall was compressible to an extent sufficient to bring the parietal layer into contact with the visceral; also whether the blood effused between the pleural layers had an effect in increasing the capillarity of the parts.

The second case, which came under observation in 1873, was that of a boy, aged 12, who was stabbed in the back, on the right side and posterior part of the chest—a wound remaining half an inch in length, situated between the fifth and sixth ribs. He had hæmoptysis, and from the distressing symptoms which he exhibited it was believed that a foreign body still remained imbedded in the lung. The wound was examined by the probe, the patient being placed in various positions in order to facilitate its entrance. It was not until the lad had been placed in a stooping posture that the probe

slipped through a slit in the muscles, entered the pleural cavity and glided against the smooth surface of the visceral pleura. As the probe entered the cavity it was accompanied by an audible rush of air causing a slight recedence of the lung from the thoracic wall, which, while facilitating the examination of the lung, did not remove it from contact with the probe. The instrument was made to move lightly over the visceral layer of the pleura until it entered an irregularity or wound in the lung, the spongy, semi-elastic lung tissue being now felt instead of the smooth surface of the pleural covering along which it had previously glided. Next, embedded in the lung, a hard substance was detected, some portions of lung tissue intervening between it and the probe. By further manipulation the probe came into direct contact with a solid substance having a rough surface, but it was impossible to determine from the touch whether it was metal or earthenware. The outer border alone could be felt, and it seemed to be about half an inch in length and not more than one eighth of an inch in thickness. On introducing a long, handled aneurism needle, the foreign body was found to extend into the lung and to have smooth sides. The parietal wound was therefore enlarged (allowing the air freely into the pleural cavity), so as to admit a pair of narrow-bladed dressing forceps, which, with considerable difficulty, reached, seized, and withdrew the foreign body from the lung. It proved to be part of the large blade of a pocket-knife, over an inch in length, half an inch in breadth and about an eighth of an inch in thickness at the back part. There was a notch on the blade of the knife at the fractured part. The detached notched portion was found firmly embedded in the fifth rib, but projecting somewhat beyond the parietal pleura. This was likewise removed from the rib. After withdrawal of the blade from the lung, profuse hæmoptysis occurred and continued for a time. When it had ceased the wound was injected with an aqueous carbolised solution, the patient immediately afterwards expectorating and saying that it gave him a "funny, nippy feeling" in his mouth. After the wound was dressed, pressure was maintained on the chest wall. The patient made an uninterrupted recovery.

In this case, after the wound was opened, and the deeper parts exposed to visual observation, it was seen that though

the air was freely admitted to the pleural cavity, and the lung had receded from the thoracic wall, it had only done so to a limited extent. In full inspiration there was not more than half an inch between the two layers of the pleura. No doubt slight pressure was maintained on the outside of the thorax during the manipulation.

It was also seen that firm pressure on the thorax brought the parietal layer of the pleura into contact with the visceral, while this effected the extrusion of the air between the layers. When this was accomplished the two layers remained in contact and the expanded lung was brought to the level of the aperture in the thoracic wall, where it was in direct contact with the external atmosphere. As long as the lad lay on his back the lung maintained its normal position with the chest wall, but when turned on his face and towards the unwounded side, recedence of the lung took place — unless pressure of the thoracic wall was maintained. As it greatly facilitated the extraction of the foreign body in the lung to have the pulmonary wound in close contact with the exterior, pressure was maintained on the thorax during the manipulation and sufficed to keep the serous layers in contact.

No doubt here, as in the last case, the normal amount of lubricating fluid between the two layers of the pleura was augmented by the presence of a thin layer of liquid blood which may have aided in the coalescence of the two serous surfaces. The capillary attraction existing between the two moistened coated surfaces aided in the distribution of the serous fluid between the layers of the pleura, much in the same way as a drop of fluid spreads out under a cover glass when placed upon a microscopic slide. The action of the biconcave meniscus was distinctly visible during the coalescence and the separation of the two serous layers. Though varied in detail, somewhat similar experience of the behaviour of the lungs when the pleural sac was opened, was many times repeated in penetrating wounds of the pleura, the lungs, and the mediastinum.

Traumatic Pneumothorax.

In 1875 a case illustrating another aspect of the question came under observation. It was one of pneumothorax originating from fractured ribs due to direct violence.

Immediately after the accident the patient fainted, and on recovery had become speedily cyanosed and was in great distress from apnœa, the cardiac action being at the same time very feeble. It was evident that the pneumothorax was so great as to press the mediastinum and its contents toward the opposite lung, whose function was likewise embarrassed. Immediate aspiration was resorted to with marked benefit and relief. This was, however, of short duration. Ten minutes later the lividity and embarrassment were as great as before. Aspiration was again resorted to, very thoroughly this time, and though the relief was immediate, it was as short-lived. On three other occasions the aspirations were each followed by a like result. It was evident that the pneumothorax was so great that it threatened life, being sufficiently powerful to cause collapse of the lung. If this compression went beyond a certain degree it would be impossible to bring the parietal layer of the pleura into contact with the visceral, and other means, more difficult of application and more doubtful in effect, would require to be resorted to to expand the lung. It is also believed that if a sufficient aperture were made through the thoracic wall, in proximity with the wound in the lung, the compression exercised by the confined air in the pleural cavity would at once cease.

My experience had not hitherto shown me an instance where such compression of the lung as this man was labouring from had been brought about by the entrance of air through an open wound in the thoracic wall. In such a case, if the thoracic wall were opened, one could deal with the lesion in the lung effectively. It was suggested that a trocar and cannula might have sufficed to draw off the air, the cannula being left *in situ*, but a direct opening in the chest wall, as nearly opposite the wound in the lung as possible, was preferred. An incision was made over the centre of the thoracic depression, a portion of a rib which had already been fractured was removed, and the pleural cavity opened freely, from which air, and afterwards blood, escaped. The lung was found to be much further collapsed than I had then seen in any of the cases with thoracic wounds. The thorax was vigorously compressed on to the contracted lung, and this induced the patient to hold his breath. The

air was extruded through the aperture, and the two serous surfaces were brought into contact. Pressure was maintained on the thoracic wall during the subsequent manipulations. It was now seen that the lung was torn, a portion of the visceral pleura having been invaginated into it. As the wound lay in the lung above the level of the rib which was removed, an inch of this upper rib was likewise taken away. The wound in the lung was now fairly opposite the thoracic wound, and the air from the lung found a direct exit. Blood escaped at first freely from the pulmonary wound, and there was a considerable amount in the pleural cavity, compression of the pulmonary wound arrested the oozing, after which the invaginated and torn portion of the visceral pleura was taken out and secured across the gap by a single stitch. Blood-clot soon filled the gap in the lung. A light pad of antiseptic gauze, loosely applied, was inserted between the lips of the thoracic wound, which was thus kept open, and any air which might come from the lung would thus escape externally. Firm pressure was kept on the external thoracic wall above and below the wound in the thorax by means of adhesive plaster, as if for broken ribs, and a firm roller bandage was applied. The relief to the patient was immediate and lasting. The wound in the lung soon closed, and the tissues of the thoracic wall were then brought together.

On two other occasions when pneumothorax threatened life from collapse of the one lung and pressure of the mediastinum and its contents toward the opposite side, after repeated aspirations were found ineffectual, a similar opening in the wall was made, as nearly opposite the wound in the lung as possible, and the collapsed lung then expanded on bringing the two visceral layers intimately into contact.

On one of these occasions, however, considerable difficulty was experienced in effecting the restoration, as the lung had been reduced to such a small volume that it was impossible to bring the rather rigid thoracic walls into contact with the lung and arrangements were made for drawing the lung outwards. It was found, however, that the lung could be partially distended by the patient making expiratory efforts with his glottis shut, such as by straining, sneezing, or by trying to cough with the mouth and nose closed. By a

combination of external pressure on the thorax and diaphragm, through the abdomen, and internal expiratory effort, the two layers of the pleura were brought together, the lung expanding and remaining expanded, while light compression of the thoracic wall was kept up.

When pneumothorax causes such absolute collapse of the lung, and this condition is persistent, pulmonary consolidation might ensue. The longer air exists in the pleural sac the drier the serous surfaces become, and even when extra fluid is poured out the natural secretion is altered and its capillarity and cohesive power are defective.

In such cases, after repeated tappings, if the pneumothorax persists to a marked extent and threatens pulmonary collapse, open the pleural cavity by removal of a portion of rib, if necessary, as near the seat of the pulmonary injury as possible, and close the wound in the lung by suturing the visceral layer of the pleura where permissible. Then place the two pleural layers together by bringing the parietal into contact with the visceral layer. This must be effected by firm pressure on the chest and diaphragm. Cohesion will again occur between the two layers of the pleura and the pneumothorax will disappear. Maintain the aperture in the costal pleura until the wound in the lung is healed, or at least until it has been firmly sealed by exudation.

Since 1875 this method of expanding the lung has been made use of by me in operations of the chest wall, in removal of tumours of the thoracic parieties, and in a few cases where the lung itself was involved in the growth, and it has answered the purpose as long as the pleural surfaces remained in an approximately normal condition.

During the thirty odd years which have elapsed I have regularly taught that molecular cohesion and capillarity were the principal forces at work in maintaining the expansion of the lung, and also that when collapse of the lung did take place, these forces could be brought into play so as to produce re-expansion of the lung. Though much has been written on the physiology and surgery of the lung, which has increased our knowledge and improved our practice, yet the old theory of the maintenance of the expansion of the lung by atmospheric pressure has been maintained, with few exceptions, by physiologists and surgeons alike. The current belief,

even now, is that the moment air enters the pleural cavity, the lung not only collapses, but does so absolutely to its hilum, and that it remains permanently collapsed. Therefore the opening of the pleural cavity is considered so dangerous that it is eschewed. A notable exception to those views is found in an excellent paper by Dr. West, which has just been read by me, but which was published in 1887. He there advocates the existence of a cohesive force between the two pleural layers.

It is still held by most physiologists that the natural elasticity of the lungs would cause them at all times to contract away from the ribs "were it not that the contraction is resisted by atmospheric pressure, which bears only on the inner surface of the air tubes and air sacs. On the admission of air into the pleural sac atmospheric pressure bears alike on the inner and outer surfaces of the lung, and their elastic recoil is no longer prevented, and a considerable space is left between it and the chest wall."

The Cause of the Expansion of the Lung.

Whatever effect atmospheric pressure within the chest may have in aiding expansion of the lung, it is clear that it is not the only factor, if, indeed, it be the chief factor, in maintaining such expansion.

Experience shows that the lung is maintained in full expansion by the molecular cohesion existing between the two serous surfaces of the pleura, and the capillary attraction exerted by a thin layer of serous fluid existing between the two moist membranes. Although this molecular force may not be considerable at any given point on the pleura, yet, when it is remembered that it is distributed over the entire surface of the periphery of the lungs, its cumulative effect is very great and amply sufficient for the purpose. When this molecular cohesion is removed collapse of the lung occurs, owing to the elasticity inherent in the pulmonary tissues. Doubtless when the pleural sac is opened and air is allowed to enter between the layers of the pleura the lung will recede, the molecular cohesion being in abeyance. Total collapse of the lung does not, however, occur from atmospheric pressure, and the degree of recedence which ensues depends upon a

number of modifying circumstances. Not only so, but while the atmospheric air surrounds the partially collapsed lung, the molecular cohesion, aided by the capillary attraction, may be brought into play to the exclusion of the intervening air, with the restoration of the lung to its expanded state.

The resultant collapse of the lung depends somewhat on the mode adopted, and on the part of the thorax selected for opening the pleura. When a choice is possible one ought to select a point as far from the hilum of the lung as possible. The outer convex aspect of the lung affords a broad surface which is suitable for opening the pleura, minimising the collapse, and at this part the molecular cohesion can much more easily be brought into play, so as to restore the expansion of the lung.

Molecular cohesion is usually illustrated by the phenomena shown when two sheets of bright polished plate glass are brought into intimate contact; they cohere, and the truer the surfaces, the more perfect the cohesion. Not only do they hold one another together against the action of gravity, but in addition they sustain a considerable weight. This must be attributed to a reciprocal action between the two surfaces, and can have nothing to do with atmospheric pressure, as the experiment succeeds in a vacuum. When, however, the surfaces of the glass are moistened and they are pressed together, the cohesion becomes more perfect, and the resistance to separation much greater. If, instead of using water, the surfaces were covered with some fluid whose surface tension was better adapted for the purpose, the cohesion would become still greater. It is well known that there are differences in the surface tension of different liquids, and even of the same liquid in varying conditions. Serous fluid, such as is found in the normal pleura, is admirably adapted for the purpose which it serves. It is at once sufficiently fluid to flow easily and to lubricate freely the surfaces of the pleura, and to exhibit the phenomena of capillarity when one of the two pleural layers is wounded. Besides this, the fluid has sufficient viscidity to make it valuable in hermetically sealing the lips of an incision in the parietal pleura, as, when one tries to separate the two surfaces a concave meniscus is at once formed at either lip of the solution of continuity. In this way, the serous pleural fluid is of value in preserving

the normal relations of the two pleural surfaces, and consequently in preventing pneumothorax when the parietal layer is wounded. The two serous surfaces of the pleura, being lubricated by this viscid serous fluid, are capable of gliding over one another as in respiration. In surgery this freedom of movement may be made use of when the parietal layer of the pleura has been incised by sliding the parietal over the visceral layer of the pleura.

One of the most striking illustrations of the power of capillarity and molecular cohesion is seen in the hip-joint. When the head of the normal femur has been detached from its socket, and all the ligaments and muscles which unite it to the body have been severed, if the head of the femur be again placed in the acetabulum while it is still moist with synovia, it will become so fixed that not only will it support unaided the weight of the whole lower extremity, but one finds it difficult to displace the head of the bone by forcible traction on the limb. Under these circumstances, in order to remove the head of the bone from the joint, it is sometimes necessary to take advantage of the long lever which the femur presents in order to prise the head of the bone out of its socket. Those who seek to perform amputation of the hip-joint by first detaching the soft parts from the head and neck of the femur, and turning the head of the bone completely out of the acetabulum, and then proceed to sever the muscles at a lower level of the limb, find that they must take the precaution of introducing a portion of gauze or other suitable material between the head of the bone and the acetabulum, otherwise the head of the femur would slip again into position in the acetabular cavity, where cohesion will fix it in such a way as to render it difficult to remove the head of the bone at the critical moment when the soft parts and the vessels are severed. Even a notch made in the acetabulum does not destroy the molecular cohesion, unless large. Experience shows that the pleura, while in a physiological state, acts in a similar way, and that the molecular cohesion enables the two layers to be held together even when the parietal layer has been penetrated and a considerable area of the lung has been exposed.

The effect on the respiration of the admission of air into one of the pleural sacs will depend, first, on the condition of

the other lung and its pleura. Provided the opposite lung is normal and in full functional activity, and its pleural and mediastinal connections are intact, the opening of one pleura will produce less serious effect on the respiratory and circulatory function as a whole. Should the one lung be limited in its respiratory capacity, the opening of the pleura on the opposite side will clearly be attended by more serious consequences. The effect of admission of air into the sac will be modified somewhat by the position in which the patient is placed at the time of operation. If the pleura be opened while the patient is lying on the sound side, the compression of that side is greatly increased by the action of gravity, which throws the weight of the now loosened mediastinum and its contents, including the heart and blood-vessels, upon the sound side and prevents the mediastinum from aiding in the fixation and expansion of the sound lung. On the other hand, if the patient be turned on the affected side, the action of gravity favours the apposition of the lung to the chest wall on that side, thus limiting the amount of air which enters the pleural sac and aiding in fixing the mediastinum and in expanding the sound lung and enabling it to perform its increased function with the least impairment.

Doubtless, after the pleura is opened, and the lung collapsed or removed, the steadying of the mediastinal septum is of service in restoring the power of respiration of the other lung, and in allowing the heart to act free from the jumble produced by the mediastinal flapping. This is best produced by the cohesion of the two pleural surfaces after the pleural cavity has been opened. This cohesion of the visceral to the parietal layer draws out the lung and fixes the mediastinum. It may also be aided by temporarily closing the aperture in the thoracic wall with moist lint. The action of gravity further assists both the expansion of the collapsed lung and the fixing of the mediastinum—therefore, by placing the patient on the affected side before opening the pleura, the difficulties of breathing are greatly obviated. The lung is kept fairly expanded and the mediastium fixed. Drawing a portion of the lung out of the aperture in the chest wall and suturing it so as to act as a plug, has not been performed by me, has been found also to cause the cessation of the dyspnœa by aiding in the expansion of the lung.

Preserve the Physiological, Lubricating, Pleural Fluid.

The possibility of the visceral and parietal pleuræ becoming dry must be considered, though this can rarely happen while the two layers are in a physiological condition. A lubricating fluid between the pleural surfaces is necessary for the maintenance of capillary action which aids molecular cohesion. Blood while in small quantity and mixed with the normal pleuritic fluid does not seem to diminish the capillarity of the fluid, and when it is in sufficient quantity to coagulate round the orifice of the pleural wound it aids in sealing the pleural cavity. Sterilised glycerine and water was used on one occasion, painted over the pleural surfaces of the lung when it had become dry from exposure during operation, and it seemed to aid the coalescence, but did not act so well as the normal lubricating fluid. Sterilised water was often used and answered the purpose sufficiently.

The Pleuræ under Pathological Conditions.

The foregoing remarks apply to the pleura in a healthy or physiological condition, but when pathological changes have supervened, then the behaviour of the pleura may be modified accordingly. When the pleural surfaces are covered by plastic exudation, or layers of fibrinous patches, the power of molecular cohesion between the surfaces is greatly lessened or lost. Instead of the smooth, glistening surface of the healthy serous membrane, with its interposed lubricating fluid, there is an unevenness of surface which prevents the exact and intimate coaptation which is so necessary for the purpose of securing perfect results, and coupled with this there is an absence of the normal lubricating fluid. When such a pleural sac is opened, unless organic adhesions have already formed, fixing the lung to the parieties, there is apt to be a degree of recedence of the lung, sometimes considerable, though this contraction does not increase much on freely exposing the cavity, emptying the contents and maintaining the potency of the external opening. Here the consistence of the pulmonary tissue is altered. There is less elasticity and less recoil, and therefore there is less tendency to collapse and less capacity of expansion. Bringing the

costal walls into contact with the pulmonary pleura is not in this case followed by immediate obliteration of the pleural cavity, as it was when the pleura was in a normal condition. Hence the necessity, in many such cases, of removing a sufficient portion of the osseous walls to permit the thoracic wall to come in contact with the lung. Obviously the recedence of the lung from loss of molecular cohesion may lead to the physical production of hydrothorax, and its restoration will quickly cause re-absorption of the fluid.

The Determination of Pneumothorax and Emphysema in Cases of Fractured Ribs.

Many authors comment on the well-known fact that with simple fracture of the ribs, emphysema is very common and pneumothorax is rare, even when the plural surfaces are free from pathological adhesions. To account for this, some assert that the air does enter the pleural cavity, but becomes so rapidly absorbed therefrom that pneumothorax is prevented. Others believe that the resistance offered by the coalescence of the two pleural layers prevents the admission of air, as it is greater than the resistance offered by the subcutaneous cellular tissue, and therefore the air issuing from the lung causes emphysema.

Regarding the former theory, one would require to assume that the air in the pleural cavity was absorbed as rapidly as it issued from the lung, otherwise pneumothorax would form. There are no known facts which support the belief in such rapid absorption of air from the pleural sac. With regard to the second theory, it is possible that the subcutaneous tissue may offer less resistance than that presented by the cohesion of the two pleural surfaces, but even if this were granted it would not alone account for the facts. In looking for an explanation, it is necessary to take into consideration the conditions in which the various layers constituting the wounded parts have been left by the lesion, and in this will be found the principal determining factors between the formation of emphysema and pneumothorax. If a spiculum of rib, while penetrating the lung, merely punctures the parietal pleura, the pleura being caught firmly round the base of the spicule so as to prevent air passing into the subcutaneous cellular tissue, then pneumothorax would be likely to result.

On the other hand, if the parietal pleura be freely torn as well as the subcutaneous cellular tissue, and a direct exit for the air from the lung into the lacerated cellular tissue be provided, doubtless emphysema would follow. The lung is also occasionally found bound to the rent in the parietal pleura by a spiculum of rib which has been transfixed and which holds it in position, the air passing directly from the lung into the lacerated cellular tissue. On several occasions where emphysema had been marked, it was found, *post mortem*, that there were rents in the parietal pleura, and a probe could be passed from the lacerated and emphysematous cellular tissue directly into the aperture in the lung.

It will be obvious also that extravasated and coagulated blood may act as a determining factor. If one of the intercostal vessels poured its blood into the lacerated cellular tissue and coagulation of the blood ensued, emphysema would be likely to occur. If blood became effused between the two layers of the pleura, and it coagulated round the periphery of the pleural wound, the air from the torn lung would be apt to be diverted into the lacerated cellular tissue and emphysema would result.

If blood was extravasated into the pulmonary tissue at the periphery of the wound in the lung, it might, by expansion, bring the sides together, or if a clot formed in the pulmonary wound itself; in either case neither emphysema nor pneumothorax would result. So that in cases of fractured ribs with penetration of the lung, emphysema occurs more frequently than pneumothorax on account of the fact that the costal pleura and subcutaneous cellular tissue are usually sufficiently torn to permit the air from the damaged lung to escape directly into the cellular tissue, and of course cohesion of the pleuræ prevents the cavity from being invaded. On one occasion a case was seen by me where rupture of the lung had occurred from direct violence applied through the chest without fracture of the ribs ensuing. In such cases pneumothorax would be likely to result.

Compression Adhesion Between the Two Layers of the Pleura.

Immediate adhesion between the two layers of the pleura takes place from sudden and violent impact in the same way

as it does between other serous surfaces, such as those of the pia and dura mater, but perhaps more frequently seen between the visceral and parietal layers of the peritoneum and the omentum or mesentery. I have seen intestinal obstruction following injury occasioned in this way.

This I have called *compression adhesion*. It is usually followed by pathological changes which may lead to organic union between the two parts originally held by compression. How often it occurs between the two layers of the pleura, there are at present no data to guide one, and from the nature of the parts such will be difficult to obtain, but that it does occur between the pleural layers the following cases show. On two occasions of immediately fatal injuries this was seen to have occurred, the adhesions in the pleural surfaces corresponded in form to that of the external body with which the thorax had come into contact. There had been no time for pathological changes to have taken place, and yet the compression adhesions were as firm as if the two pleural layers had been stamped together. There was slight extravasation of blood into the pulmonary tissue corresponding to the position of the adherent pleuræ. This extravasation would doubtless have been much greater had time permitted. In one of these the woman had fallen from a height on to a kerbstone, the thorax striking the stone longitudinally from the third rib in front to the diaphragm below. An ecchymosis corresponding to this strip appeared in the subpleural pulmonary tissue. In such cases neither emphysema nor pneumothorax could occur even with fractured ribs.

The Causation of the Primary Shock in Admission of Air to the Pleural Sac.

The primary shock which ensues on the admission of air to the pleuræ, and which follows the collapse of the lung, has been attributed to the effect which the air produces on the pleura, or to the effect on the pneumogastric filaments occasioned by the sudden contraction of the lung tissue. Neither of these theories are sufficient to account for the intensity of the phenomena produced. Doubtless the compression of the lung and impairment of the respiratory exchange of gases, as well as the displacement of the medias-

tinum, lessening the powers of expansion of the lung, are contributory to the production of primary shock. My observation leads me to the opinion that primary shock is really due to the effect upon the heart. Although the lungs are respiratory organs, they are so intimately connected with the heart that one cannot consider them apart, especially during surgical procedure. The heart and the thoracic great vessels, along with the mediastinal structures, are practically suspended or buoyed up by the soft elastic lung, as long as the lung remains fixed to the thoracic wall. When one lung collapses the heart and great vessels lose much of their support, and though still partially supported by the pulmonary tissue on the other side are yet apt to suffer. With the thoracic cavity of one side filled with fluid or air, the heart, though pressed on unduly, is steadied, and is not allowed to swing about as it does when the thorax on one side is fully opened, the lung collapsed, and the mediastinum flops toward the empty space.

One patient, who was *in extremis* from disintegration of the left lung and pressure within the left side of the thorax, was relieved at once by thoracotomy, yet the flopping of the heart was so great within the empty cavity as to cause him to have an intense angina-like spasm on being turned ever so gently from one side to the other. The recurrence of this cardiac spasm was prevented by a soft gauze packing inserted inside the thorax, fixing the pericardium and steadying the mediastinal contents. In the subsequent course of the case it was interesting to observe how Nature intervened by fixing the pericardium by means of fibrous adhesions to the anterior thoracic wall and by an extra band to the diaphragm.

When air is admitted into the pleural cavity an important factor, which must not be overlooked, is the immediate and direct effect which the shrinkage of the lung produces on the heart. The pulmonary circulation is carried on by a series of vessels possessing great capacity for extension under linear traction, and having a remarkable power of recoil. These vessels are in contact with the heart at one extremity and with the periphery of the lung on the other, and in their whole course between the heart and the pulmonary periphery there are no anastomoses. In the periphery of the lung, where the veins lie beneath the pleura, and the subdivision

of the vessels is very fine, anastomosis does occur, but between this point and the left auricle there are no anastomoses. Consequently the influence produced by the peripheral arrest of pulmonary circulation would be instantly transmitted to the heart. This will be further evident when it is borne in mind that the four main pulmonary veins are so intimately connected with the heart that they may be regarded as diverticula of the left auricle sharing in its rhythmical contractions, having even incorporated into their texture striated cardiac fibres. The pulmonary veins have no valves anywhere in their course, so that the full force of any sudden stoppage of peripheral pulmonary circulation will be borne upon the heart directly. The result of the entrance of air into the pleura, when it produces contraction of the lung, is felt most at the periphery of the lung which shrinks, and that peripheral shrinkage in the calibre of these minute vessels greatly impedes, and may even arrest, the flow of the blood through them, and consequently through both the pulmonary arteries and veins. As this occurs suddenly, arresting the flow of blood into the lung from the right ventricle and at the same time gorging the right auricle, it produces an immediate staggering effect upon the heart, which falters in action and results in dyspnœa and lividity of the cutaneous surface. If it were bilateral it would probably lead to a fatal issue; but when unilateral, and if means be adopted to minimise the action, the cardiac function is soon restored, even when the one lung remains contracted.

The Pleura in the Anterior Mediastinum.

In the anterior mediastinum the layers of the parietal pleuræ from both lungs meet, and as at this point they are very thin, when air has entered one pleural sac and when rapid displacement or flopping of the mediastinum takes place, it is possible for rupture of the opposite pleura to occur, leading to embarrassment of function or collapse of the opposite lung. The possibility of a potential or patent opening existing between the two pleural layers in the anterior mediastinum ought to be borne in mind. Though such an opening has not been demonstrated as occurring in man, it is sometimes found in the dog, and commonly in some of the lower animals,

such as the solipeds. If such an opening pre-existed admissions of air into one pleural sac would fill both pleuræ and tend to produce compression of both lungs. I have not had such an experience, and have not heard of any reported case of the kind. The mediastinal pleura is attached to all the important mediastinal structures, such as the pericardium, the trachea, œsophagus and the vagus and phrenic nerves. It is difficult to separate the mediastinal pleura without endangering these important structures, besides possibly opening the neighbouring pleural sac.

The Hilum of the Lung.—In attempting removal of one lung, injury to the mediastinal contents is one of the chief dangers. The hilum of the lung in the mediastinal space is close to the right auricle, the vena cava and the trunks of the pulmonary artery and veins. *In attempting removal of the lung*, it is better to imitate Nature by leaving the hilum, as is seen in separation of the slough in gangrene of the lung, severing the tissues several inches to the outer side of the hilum, when the phrenic and vagus nerves are left uninjured. The pleural covering of the mediastinum ought to be left intact if possible.

The Apical Pleura.—The pleura at the apex of the lung is attached to the innominate vein, and further out to the subclavian artery, and sometimes even to the brachial plexus. Therefore it is better to leave intact the parietal, and even the visceral, layer of the pleura if it be adherent at the apical part.

Preserve the Attachments of the Diaphragm.

When one makes extensive operations on the chest wall, it is important to preserve the ribs to which the diaphragm is attached and also the attachment of the diaphragm to the ribs. By removing the whole of the ribs on one side of the chest to which the diaphragm is attached the breathing on both sides of the chest becomes laboured or is made with an effort, the diaphragm no longer performing its function properly. Fresh attachments are, however, soon formed by the diaphragm if there are fixed osseous points remaining. When one remembers that the diaphragm is the most powerful respiratory muscle, the importance of retaining its attachments will be obvious.

In the few remaining minutes which are still at my disposal, instead of giving a hasty clinical *résumé* of personal experience, I have thought it better to give an illustration of one of the gravest forms of tubercular destruction of the lung, in the hope of showing that whatever opinion we may form concerning surgical intervention in the earlier stages of tubercular invasion of that organ, yet when the other extreme has been reached, and the patient has sunk into what has commonly been regarded as an incurable condition from lung disintegration, that surgery may be of service, not only in alleviating distress, but also in furthering actual cure.

Extract from Case of R. W.

When admitted in Professor Macewen's wards patient was in the following condition :—

Patient was much emaciated and *sat* in bed. He had rapid breathing and an aspect of distress, and was covered with perspiration, and complained of pain below the left shoulder-blade and in left mid-axillary line, toward the lower border of costal margin. When he attempted to get out of bed he was very short of breath and experienced what he described as a crushed feeling round the body. He could lie for a short time on his back or on the left side, but could not do so on his right side for more than a few minutes without becoming cyanosed and having great discomfort and a sensation of asphyxia.

Physical Examination. — There was a great bulging and fixation of the left side of the chest. Expansion movements were lost on the left side. The respirations numbered 24 per minute. There was a diffuse pulsation in the third, fourth and fifth interspaces on the right side. The pulsation could be seen in these spaces extending from the vertical nipple line to about 3 inches to the left of the nipple. There was dulness to percussion over this area and the sounds of the heart could be distinctly heard. The sounds were evidently due to the displacement of the heart to the right side. There was absolute dulness over the left lung both in front and behind. This dulness was continuous with the splenic dulness below, and in the middle line extended for 2½ inches below the costal margin. On the left side the

respiratory murmur, the vocal fremitus and resonance were absent. Over the right lung the respiratory murmur was free, with the exception of the right mammary region, where some subcrepitant râles were detected, and there were coarse râles at the base. The temperature has only been about 100° F. in the evening, and in the morning has been normal. He has almost no expectoration, the patient stating "he only wished he had," as when he was expectorating mouthfuls of pus he had been easy, but since it ceased he had become gradually more and more distressed, and now found he could not get breath. The history of the case pointed to:—

(1) A disseminated tubercular invasion of the left lung, commencing nearly three years previously.

(2) Probable extensive tubercular disintegration, upon which a secondary pyogenic infection had taken place.

(3) The formation of an abscess cavity or cavities in the left lung.

(4) The formation of a pneumothorax from perforation, or the formation of a very large cavity in the lung representing total pulmonary disintegration, and giving signs simulating those of pneumothorax, or possibly both combined.

(5) The pulmonary cavity emptied itself regularly for eleven months by free expectoration, through the bronchi, trachea and mouth, till shortly before his readmission into the infirmary, when it ceased entirely, soon after which there was increased pain and distress in chest, and probably from the accumulation of pus. The cessation of purulent expectoration was possibly due to the soldering of the bronchi by granulation tissue, which no doubt took place gradually, but the last patent bronchus became filled with a plug of granulation tissue probably projecting from the margin of this bronchus when the expectoration suddenly ceased.

(6) The right lung, it was feared, was already affected with tubercle, judging from the physical signs in the right mammary region, and also from the liability of both lungs being affected when such an extensive lesion existed in one of them. His condition was such as to imperatively demand relief.

Operation, April 24, 1895.—The patient was placed slightly under the influence of an anæsthetic, as, owing to the great embarrassment in breathing, and the general lividity, the full

anæsthetic effect was not considered safe. An incision was made over the seventh and eighth ribs in the line of the posterior axillary border. The periosteum was raised and a couple of inches of each rib were removed. The wound was then dusted with iodoform and boracic acid, which was rubbed into the soft tissues and the cut ends of the ribs, after which the periosteum and thickened pleuræ and layer of lung tissue were penetrated by a pair of dressing forceps, which were then withdrawn while the blades were fully expanded.

From this aperture 160 ounces of pus, along with sloughs of the lung and caseated *débris* were removed. The pus contained tubercle bacilli in enormous numbers and individually of large size, each drop taken indiscriminately from the receiver containing the pus swarmed with them. It is rare to find tubercle bacilli in such quantities in pus even from lung abscess. The fluid contained in this cavity seemed to have acted as a culture medium for pyogenic organisms, both streptococci and staphylococci being present. By means of the finger and the long probe introduced into the cavity, a dense layer of lung tissue with shreds of disintegrated lung were found still adherent to the chest wall. After thorough evacuation this cavity was washed out with an antiseptic solution and gauze was introduced as a drain.

This operation afforded great relief, except that the patient would not dare to turn from one side to the other, and preferred to lie on the sound side. He said that when he tried to turn, something gave him a violent wrench, as if "his heart were being pulled out." This was attended by a distressing angina-like spasm. The reason for this sensation which the patient experienced, was not understood at the time, though it was afterwards fully explained. After four weeks it was evident that the great space on the left side of the chest was not closing, and besides there was a persistent and free purulent discharge from this large cavity, which, if it were allowed to continue, would soon have exhausted the small amount of strength which the patient still possessed.

Under these circumstances it was deemed advisable to perform thoracoplasty, both with the view of thoroughly exploring the cavity and removing the shreds of lung tissue still remaining, and also with the hope of reducing the

dimensions of the cavity by permitting the external wall to be involuted.

Excision of portions of the fourth, fifth, sixth and seventh ribs was performed, each portion extending from the angle of the rib to the costal cartilage. It had been intended to remove three other ribs, but the patient's condition was such that their removal had to be deferred. The view obtained of the interior of the left side of the thorax by this free opening was such as to enable one to see that there was no vestige of the left lung remaining, save shreds adhering to the walls of the chest, a portion at the apex, and a stump representing the larger bronchi and the corresponding blood-vessels, somewhat fused together, and covered by granulation tissue. Behind this stump the descending aorta was seen and felt, and in front of the stump the pericardium lay freely exposed and non-adherent by pathological adhesions. The absence of the pericardial pathological adhesions was so marked and the normal attachments so relaxed from over-stretching of the diaphragm downwards and pressure of the heart toward the right side, that when the patient lay on his sound side the heart rested against the anterior mediastinum, and when he turned on to his back the heart flopped backwards over the stump of the bronchi, and the lower portion of it within the pericardium swung free in the thoracic cavity. The pericardium was somewhat thickened, but not so much as one would have expected, owing to the great destruction of the lung tissue occurring in its immediate vicinity.

The free movement and flopping of the heart inside its pericardium explained the strong objections which the patient expressed, previous to this second operation, to being turned from one side to the other, as he said each time he was turned it gave his heart a wrench. This had not been experienced by him before the evacuation of the fluid from the chest, but had been markedly felt in the interval between the first and second operation. There were several shreds of disintegrated lung tissue still adherent to the diaphragm, to the outer walls of the chest and to the apical part of the thorax. The former were removed, the latter cut short, their proximity to the large subclavian vessels rendering it undesirable to attempt complete removal. In order to prevent displacement of the heart and to hasten adhesions between the pericardium, the

mediastinum and the diaphragm, the large cavity was packed with gauze, which was changed at frequent intervals. Subsequently adhesions quickly formed between the pericardium and the diaphragm, one of these first appearing as a comparatively thin band which stretched somewhat during the dressing. It gradually became thicker until it attained the diameter of a finger. These adhesions were then able to hold the overstretched pericardium in its place, and thus to prevent the swinging of that organ, which it was previously subject to when the patient was turned from one side to the other. Soon after these adhesions had formed, the pericardium became attached to some of the structures in the anterior mediastinum, and later to the anterior wall of the chest and to the stump of the bronchi behind. Gradually all the structures presenting on the left side of the mediastinum became covered with granulation tissue and fused together, so that their individual outlines were lost, a continuous wall having been formed over the left side of the mediastinum from the anterior to the posterior portion of the thorax. The right lung likewise expanded to the right side. Portions of the third, eighth, and ninth ribs were removed at a later date to further facilitate contraction. The osteoplastic resection thus extended from the third to the ninth rib inclusive. After the interior had become aseptic and a layer of healthy granulation tissue had filled the various recesses, the skin was laid over the now thickened pericardium and diaphragm and stump of lung, and soon became adherent and filled up the cavity; a small sinus at the upper end persisted, coming from a point where shreds of the apical portion of lung remained. On several occasions, while the cavity of the thorax was still open, these were attempted to be detached, but on each the adhesions were found too firm to permit of easy separation. The adhesion of the apical portions to the subclavian vein precluded further detachment. The loose portions were trimmed. His general health meanwhile improved, the râles disappeared from his right lung and he gained strength and weight, and was able to walk about and enjoy life.

It is now eleven years since this man was operated on, and since his convalescence he has been able to engage in light work, supporting his wife and family thereby. He can walk about easily while taking time, and generally enjoys good health.

Examination of his lung at present time :—

On June 3, 1906, this patient was examined by three physicians, who reported that there were no breath sounds on left side of the chest, except the transmission of bronchial sounds heard under the clavicle on left side. The right lung appeared normal. The heart sounds were good. The patient states that he has been regularly at work as a light porter; he can go upstairs without trouble. He mounted the eighty odd steps of the Infirmary stairs before he was examined, and did so without pause and with very little inconvenience. He states that since his operation he has walked ten miles without fatigue, but he does so at what he calls an "ordinary easy rate." Since the operation he has never been ill and has regularly been at work.

Gentlemen, allow me to thank you for the honour you have done me by inviting me to deliver the Cavendish Lecture for 1906, and also for your patient and courteous attention during its delivery.

LOCAL ANÆSTHESIA, STOVAINE, ALYPIN, NOVOKAINE.—Braun, Leipzig (*Deutsche m. Wchns.*, 1905, No. 42), considers that any drug for local anæsthesia should, (1) in relation to its local anæsthetic effect be less toxic than cocaine; (2) be absorbed without injury or irritation of the tissues; (3) be soluble in water and the solution should keep its character, and if possible be easily sterilised; (4) it should be compatible with and not interfere with the vaso-constricting action of suprarenin; (5) when it is to be used on mucous membrane it should penetrate it rapidly. *Stovaine* does not fulfil the second condition, on the other hand is an advance in spinal anæsthesia; *alypin* is very good as regards 3, 4 and 5, but is very irritating; *novokaine* is neither poisonous nor irritating, is easy to use, at least as valuable as cocaine, and particularly valuable in combination with suprarenin, the effect of which it seems to increase.

Reports of Proceedings.

CLINICAL EVENING.—Friday, April 6, 1906.

LEONARD BIDWELL, Esq., F.R.C.S., President, in the chair.

The following gentlemen were unanimously elected members of the Society: Edgar Bulleid, M.D.Durh., 10, Southwick Street, Hyde Park, W.; Alfred Sutton Millard, B.Sc., M.B., B.Ch.Edin., Costock Rectory, Loughborough; Wm. Allen Simpson, M.B., C.M.Edin., "Benalon," South Parade, Bedford Park, W.; Edwin Smith, M.D.Lond., 96, Sloane Street, S.W.; Oswald S. Wraith, M.D.Durh., F.R.C.S.Edin., Thornleigh, Darwen, Lancs.

Two Cases of Acanthoma of Neck.

Mr. J. HOWELL EVANS: The two cases which I bring before the Society this evening are illustrative of a local and a diffuse congenital condition of the skin found more frequently upon the neck, but also less frequently upon the head, and rarely upon other parts of the body. I am led to believe that these thistle-like growths, as the term acanthoma implies, owe their origin to certain cutaneous irregularities at the intertrematic zone of the various myomeres of the body.

To explain my dictum more clearly I will illustrate to you by a series of lantern slides the relation which the particular cases shown this evening bear to the branchial recesses.

Mr. Howell Evans then showed an interesting series of lantern slides which not only illustrated his points, but gave evidence of a wide knowledge of the allied conditions found in various animals, fish, and wattled birds.

The PRESIDENT: I am afraid that I cannot quite agree with Mr. Howell Evans as to the relationship of these tumours to the branchial clefts, as I have seen them in other situations. Recently I saw one on the edge of the scalp just above the ear, and I have seen them on the trunk and extremities. I am strongly in favour of removal of these tumours in middle-aged patients, since I have described a case of rodent ulcer which occurred in a congenital mole. Although the name acanthoma is new to me, the variety of congenital mole to which the name is applied is not uncommon.

Dr. WILFRED FOX: With regard to the histology of the two cases shown by Mr. Howell Evans, he has quite rightly, I think, referred to the lesions as "acanthomata," or tumours

consisting of prickle cells. They belong, of course, to the large group of moles or nævi—using the latter word in the Continental sense—which includes all circumscribed deformities of the skin or mucous membrane which are of congenital origin.

These moles are divided into two kinds: (*a*) soft moles, in which the growth is in the corium, and (*b*) hard moles or verrucosa nævi, in which the tumour is situated in the epidermis. The cells forming the soft moles are, I think, epidermal in origin, and are covered by the corium early in life; many histologists, however, maintain that these "nævous cells" are not epidermal, but are derived from the endothelium of the lymphatics. The verrucose nævi are again subdivided according to the layer of the epidermis, which is thickened. The commonest are the keratoid, in which the stratum corneum alone is thickened; the acanthoid, which consists of prickle cells only; and a combination of the two. I agree with the President in holding that the linear ones, as seen in the boy's neck, are by no means confined to the region of the branchial clefts. One sees them in all parts of the body, occasionally coinciding exactly with the distribution of a nerve; other theories are that they follow Voigt's lines, imaginary lines marking out the junctions of nerve distributions; or again, that they follow the superficial lymphatics, or the lines of cleavage of the skin. No one of these theories will cover all the cases, although in individual cases each of them appears to have some evidence to back it.

Mr. HOWELL EVANS: I should like to express my opinion that the correct treatment of these growths is complete removal with the knife. This occasion affords me the opportunity of definitely stating that in my opinion these warts never become malignant unless they bleed, or unless some injury is inflicted upon them, whereby a channel for infection is opened up. These conditions give the scientist the strongest of arguments for the infective theory of acanthoma.

(1) A Case of Pityriasis Rubra Pilaris passing into Dermatitis Exfoliativa.

Dr. P. S. ABRAHAM: Thomas D., aged 31, a labourer engaged in washing tins with sand and soda, presented himself at the Hospital for Diseases of the Skin, Blackfriars, on February 19 this year, with the characteristic appearances of Devergie's "pityriasis rubra pilaris." There was redness of the face and head, with branny desquamation and redness of the hands, with much thickening of the epidermis of the palms. Upon stripping, the back, chest and arms were seen to be covered with discrete red acuminate papules, coalescing

in some places, and evidently a follicular keratosis, giving to the finger a characteristic nutmeg-grater feel. He complained of no itching or other subjective sensations. He stated that the eruption was of two weeks' duration, and had come on after a severe cold that he had contracted, and that he had previously always enjoyed good health. On March 1, a fortnight later, most of the papules had coalesced, and the eruption had spread downwards to the legs; here, also, the hair follicles were primarily affected. The general appearance now was rather that of pityriasis rubra, the greater part of the integument being of a uniform brilliant red, with large desquamating areas of epidermis. There was still no itching or other functional disturbance. The note on March 12 is: "Eruption now generalised, slightly clearing off from above. Complains of itching of the legs." April 2: "Desquamation less, itching worse; still feels quite well." April 5: "Now complains of general itching, and sleep affected; general scaling somewhat increased." The chief interest of the case to me is its rapid transition from a follicular keratosis to a generalised exfoliative dermatitis. Except perhaps in the slightly increased induration of the corium, it now much more resembles one of ordinary "pityriasis rubra" than of Devergie's "pityriasis rubra pilaris." I ought to mention that for several weeks the patient was taking thyroid gland, and that it is possible that this may have had some effect in producing the change. A microscopical section taken from a commencing lesion on the thigh shows little more than a desquamating hyperplasic epidermis: unfortunately the section does not exhibit the central hair follicle.

(2) A Case of Cornua Cutanea.

A little girl, aged 5, with several horny outgrowths springing from an indurated base irregularly situated on one foot, one hand, buttock and abdomen. There had been ten altogether which had appeared about a year ago. The smaller ones have been destroyed by free applications of acid nitrate of mercury and salicylic acid, leaving only small scars; but the three largest ones, now seen on the foot and hand, had rather increased in diameter, with more swollen, inflamed and indurated bases, although the distal part of the outgrowths had been destroyed by the application. I now intend to remove them freely by surgical means. The child appears to be perfectly healthy.

(3) A Case of Impetigo Annulata.

A boy with ringed crusty patches on one side of his face, and some smaller impetiginous spots on the lips and other

cheek. Duration one week. Shown as an example of a somewhat rare variety of the common "impetigo contagiosa." The crusts are perhaps more flattened and less abundant in this instance than in the ordinary form. The first case of the kind recognised as a variety of impetigo contagion occurred in this Hospital in 1894, and was shown by me at the Dermatological Society of Great Britain and Ireland in October of that year.

The PRESIDENT: The appearance of the lesions in the case of cornua cutanea rather suggested at first either a syphilitic or tuberculous origin. Dr. Abraham, however, tells us that the appearance was quite different before he commenced treatment. One of the lesions now might be taken for lupus verrucosus, but the appearance is probably only due to the action of the caustic employed.

Mr. E. PERCY PATON: I was greatly in doubt as to the nature of this case (cornu cutaneum) until I heard that it had been treated by caustic applications. These applications have introduced an inflammatory element, which has much altered the appearance of the swellings. In my experience I have usually found it best to excise the horny masses.

Dr. PERCY POTTER: Much interest attaches to Dr. Abraham's case of exfoliative dermatitis, for it corresponds in most details with those cases constituting an epidemic in the West of London a few years ago. This outbreak was attended with marked constitutional disturbance, and many of those attacked who were over 60 years of age died. The disease is probably contagious even under good sanitary conditions, and it was ascertained to be conveyed by milk.

Mr. J. HOWELL EVANS: With regard to Dr. Abraham's case of cornua cutanea, I only rise to acknowledge the soft impeachment of having introduced the question of branchial clefts, but I desire all present to consider that hereby I am putting forward the most evident of the depressions on the body, whereas there are numerous other lines of segmental union, in which an untold fount of supply of abnormalities are daily supplied to the dermatologist.

Two Cases of Locomotor Ataxy in Women.

Dr. ARTHUR SAUNDERS: Dr. Seymour Taylor, who regrets that he is unable to be present to-night, asks me to show for him these two cases of locomotor ataxy both in woman patients. In both there are absence of knee-jerks, lightning pains, and the Argyll-Robertson pupil. In one ataxy is marked, while in the other there is but little ataxy, but severe gastric crises. Tabes dorsalis is considerably rarer in women

than in men, and in these two typical cases we have well-marked instances of the disease.

A Case of Syphilitic Osteitis presenting Resemblances to Osteitis Deformans.

Dr. ARTHUR SAUNDERS: This patient, a man, aged 45, is suffering from syphilitic osteitis and hypertrophic cirrhosis. I first saw him three months ago, when he came to my out-patient department, extremely weak and ill, with marked jaundice, constant pain in the upper part of the abdomen and some œdema of the legs.

He gave a history of chronic dyspepsia of five years' standing, and for about the same time had noticed that his head had been increasing in size, and that his legs were becoming bowed. The size of his hat had required to be increased from 6⅝ ins. to 7¼ ins.

On examination, in addition to the curved and thickened femora and tibiæ and the enlargement of the skull, which is symmetrical and most marked in the temporal and lower parietal regions, giving a somewhat globular appearance to the calvarium, there was present a smooth, painless uniform enlargement of the liver, which reached downwards to the right crest of the ilium. There was no demonstrable ascites. The spleen could not be felt.

He gave a history of a hard sore as a young man, treated for but a short time, and of having taken alcohol in fair amount, but never to excess.

Under treatment of rest in bed, inunctions of mercury and exhibition of mercury biniodide internally, within a week the jaundice had nearly disappeared, the liver had decreased in size and the patient felt considerably stronger. At the end of two weeks, as he began to notice a "sweetish" taste in his mouth, the mercury was discontinued and a mixture of iodide of potassium and quinine substituted. He has steadily improved, has gained weight and strength, and though his liver remains large, he expresses himself as now feeling quite well, with the exception of getting some pain in the legs if he walks far.

A Case of Sclerodermia.

This patient, aged 45, who presents in the interscapular region an area of atrophic skin associated with infiltrated patches and much pigmentary disturbance, is a case of sclerodermia.

The skin of the atrophic areas is thin and shiny, of a creamy-white colour, becoming in places of bluish or pinkish-violet hue. The infiltrated patches, which are more or less

definitely circumscribed and slightly raised, are dry and rough on the surface, and when pinched up between the fingers the skin is here found to be tough, thickened and inelastic. The pigmentation, of a deep brown colour, is most intense at the edges of the affected areas.

It is interesting to note that there is in this case a definite history of injury, which appears to have produced the lesion.

The man, who works for the sanitary authority of his district, removes the galvanised iron tins which are used to collect refuse. In the summer these sanitary tins get very hot in the sun, and he says "he is glad to get through the house to the van to get rid of them." Two years ago, from carrying these hot tins, his back became sore and "festered on the surface." This healed up, and at the present time his back causes him no trouble, except slight irritation at times, usually in the night.

Dr. P. ABRAHAM: I am much interested in this case as it bears out my view that the lesions of sclerodermia are the result of some interference with the nerves supplying the part; and I quite agree with Dr. Saunders that the carrying of the hot weights is the probable cause. Another point of interest: at first sight the case might easily be mistaken for one of "leucodermia" with surrounding "melanodermia"; the central loss of pigment and increase around being the most obvious features. On close inspection, however, the atrophic condition of pale area is apparent: the integument has lost its elasticity and cannot be so easily pinched up.

A Case of Rickets with Anæmia and Great Enlargement of the Spleen.

This little boy, now aged 11, was shown by me at the November meeting of this Society in 1903 (*v.* WEST LONDON MEDICAL JOURNAL, vol. ix., No. 1, pp. 30-34), as a case of rickets with anæmia and great enlargement of the spleen. He has lately again come under treatment for a return of his symptoms—anæmia, shortness of breath, headache and abdominal pain.

The pallor of complexion is not so marked as when he was last here, but with his large, square head, with marked bossing in the posterior parietal and occipital regions, his bright red hair and his flat face, with the wide separation of the eyes and depressed bridge of the nose, he still presents a very remarkable appearance.

The spleen, which is slightly tender, reaches $\frac{1}{2}$-inch below the umbilicus in the mid line, and to within $\frac{3}{4}$-inch of the left anterior superior spine. The liver can be felt 1 inch below the costal margin in the right nipple line. The super-

ficial glands are slightly enlarged. He is short for his age, the abdomen is protuberant, and the anterior posterior curves of the spinal column are exaggerated. Though pale he appears well-nourished and the subcutaneous fat is well developed. He is bright and intelligent.

The examination of the blood on April 3 showed:—

Red cells ...	2,590,000 per c.mm.
White cells	9,400 ,,
Hæmoglobin	65 per cent. of normal.
Colour index	1·25

A differential count of the white cells showed:—

Polymorphonuclear ...	47 per cent.
Large mononuclear ...	4 ,,
Lymphocytes	44 ,,
Transitional	2 ,,
Eosinophiles	2 ,,
Mast cells ...	1 ,,
	100

There is thus an anæmia with decrease of the red cells to about one half of the normal, with a slight increase in the hæmoglobin value of the individual red cell. One or two nucleated red cells were also seen. The white cells show a relative increase as regards the lymphocytes.

When I showed the patient before I spoke at some length on these curable anæmias of children. In this case I regard rickets in combination with congenital syphilis, which, in spite of the absence of any definite history, his facies strongly suggests to be here present, as the cause of the anæmia, and I have no doubt that under treatment with fresh air, nourishing diet and a mixture of iron and arsenic, his improvement will be as rapid as it was before.

Polycystic Kidney.

Mr. Donald Armour: This is a patient from whom I removed a large polycystic kidney sixteen months ago. (Specimen shown). I showed her to the Society just before she left the hospital. She has been in perfect health ever since. The urine has been examined at regular intervals by our pathologist, Dr. Hamilton Wright, and remains normal.

Mr. J. Howell Evans: I consider that the question of increased output of urea, to be subsequently followed by a diminution, bears less upon the fact of extirpation of the kidney, than upon the question of tissue reaction which follows all operations of any severity, and upon the diet of the patient; that too frequently the nitrogenous metabolism, *i.e.*, the relation of ingesta to excreta, is so inaccurately calculated that the correct relation of the quantity of albumen and urea is overlooked.

Bony Ankylosis of the Jaw.

Mr. DONALD ARMOUR: This patient, aged 24, has also been before the Society, just after her operation sixteen months ago. The operation was undertaken for bilateral bony ankylosis of the temporo-maxillary joint dating from infancy. It will be seen that not only has she a fair range of movement, but those who have seen her before will agree that there is marked improvement in her appearance and in her speech.

A Case of Epithelioma of the Ear.

Dr. LEONARD DOBSON: The man whom I show this evening is aged 72, and first noticed a small pimple on the edge of his ear two and a half years ago. This soon became a sore and has gradually spread until it has become the size you now see. When first seen it was very painful and swollen and there was an enlarged gland behind the ear, probably inflammatory, as it has now subsided with boric acid fomentations. The lower edge of the ulcer at first appeared to be rolled over and of a pearly glisten, giving one the suggestion that the case might be one of rodent ulcer. I, however, excised a small piece, which on microscopical examination proves to be a squamous epithelioma. It is proposed to treat him by means of X-rays.

Mr. E. PERCY PATON: There can be no doubt, I think, as to the nature of this case, even apart from the microscopical investigation of which Dr. Dobson has told us. I understand that the gland which can be felt in the neck is a good deal smaller than it was, and I should judge this to be the result of the cleaning of the ulcer by treatment, which has removed the septic element. I should not myself treat the case with X-rays, but should prefer to remove the growth, and also possibly the enlarged gland, though it is true that this is too unfavourably placed for one to anticipate a very satisfactory result.

A Case of Molluscum Fibrosum.

Mr. E. PERCY PATON: The man I have shown this evening is aged 58. For the last thirty years he has noticed the gradual development of the pendulous tumours which are now to be seen freely distributed all over his body, while on his right buttock is a huge pendulous mass which is undoubtedly of the same nature as the other tumours. No cause is known for this condition of molluscum fibrosum; but in many cases it has been shown that they are related to the nerves, when the condition has been termed one of neuro-fibromatosis, or von Recklinghausen's disease. There is no evidence that this is the case in my patient, as he suffers

no pain; on the other hand, the absence of pain does not exclude the connection. The condition is not infrequently hereditary, and one of the sons of this man is affected in a similar manner to himself.

Rodent Ulcer occurring in a Tertiary Syphilitic Ulcer.

The PRESIDENT: This patient is a man aged 47, who has been under my care for over two years, suffering from tertiary syphilis. He contracted the disease about eight years ago. Two and a half years ago he developed a sore on the right side of the chin, and others on the right leg. They all healed under iodide. The sore on the chin left an uneven scar. About six months ago the scar on the side of the chin became ulcerated again, and in spite of large doses of iodide it did not heal. In appearance it now suggests rodent ulcer; there is a little ulcerated surface near the margin which is quite devoid of granulation. There is no enlargement of any lymphatic glands. It is now being treated with X-rays, under which treatment it is healing up. I am inclined to think that this is a rodent ulcer developing in the scar of a tertiary syphilide.

A Case of Gouty Bursitis of Olecranon Bursæ.

This patient, a female, aged 58, had suffered from attacks of gout in the great toe-joints for many years. For the last ten years there had been considerable deformity of the hands, and recently she has complained of pain in both olecranon bursæ. Each bursa is considerably enlarged, and there are a number of chalky deposits on its walls. There was a little redness and effusion into the bursæ when first seen. It is important to bear in mind the possibility of a chronic bursitis in this situation being due to gouty deposits.

A Case of Friedreich's Ataxia.

Mr. ASLETT BALDWIN: As a mere surgeon I have brought this case forward with some trepidation, fully expecting to be mercilessly put down by the physicians present for my temerity, but my excuse is that the man came a few days ago to my out-patient room complaining of his feet, and that the case is a somewhat rare one and of considerable interest. The patient's age is 24. He first noticed something wrong with his feet when about 15 years old. There is now well-marked pes cavus; he has a tendency to walk somewhat on the outsides of his feet, which cannot be dorsiflexed beyond a right angle with the leg, showing that there is some talipes equinus present. There is extension at the metatarso-phalangeal joints, flexion at the interphalangeal joints, and

the extensor tendons stand out prominently. The muscles of the legs, thighs and hands are somewhat wasted. There are no knee-jerks, no plantar reflex, no ankle clonus, no Argyll-Robertson pupil, no Römberg's sign. On looking to one side nystagmus is present, especially on looking to the left. There are slight tremors of the arms and hands when he moves them. He walks and speaks well, his intellect is unimpaired, and there is no scoliosis, which is sometimes present in this disease, as also a peculiar thickness of speech, as if something were being held in the mouth while speaking. As far as he knows there is no history of similar trouble in his family. He has nine brothers and sisters, all of whom, he states, are well. His parents were not related before marriage, and he knows of no mental or nervous disease in the family.

These cases are apt to be mistaken for disseminated or insular sclerosis, but in that disease the speech tends to be syllabic, the knee-jerks are exaggerated, intention tremors of ankle clonus are present, and there may be optic atrophy, but there is no scoliosis and no pes cavus. In cerebellar ataxia the gait is reeling, the knee-jerks are not lost, and there is no deformity of the spine or feet. In locomotor ataxia there is the typical gait, the patients cannot stand with closed eyes, there are various crises and lightning pains, the pupils react to accommodation but not to light; in this disease also the knee-jerks are lost, except in the early stages.

ORDINARY MEETING.—Friday, May 4, 1906.

LEONARD BIDWELL, Esq., F.R.C.S., President, in the Chair.

The following gentlemen were unanimously elected members of the Society: T. Webster Atkins, L.R.C.P. and S.Edin., 31, Shepherd's Bush Road, W.; Wm. J. Colborne (Fleet Surgeon, R.N.), M.R.C.S., L.R.C.P.Lond., c/o Admiralty, 18, Victoria Street, S.W.; Geo. C. Low, M.A., M.B., C.M. Edin., 57, Welbeck Street, W.; E. Carroll MacDowell, B.A., M.D.Dub., M.B., M.Ch., F.R.C.P.I., The Mall House, Sligo; James Moorhead (Col. I.M.S. retd.), M.A., M.D., R.U.Ireland, M.R.C.S.Eng., 15, Kensington Park Road, W.; Alfred Kerr Thomson, M.B., C.M.Edin., 65, Lancaster Road, North Kensington, W.; Chas. J. Newton, M.R.C.S., L.S.A.London., 5, The Grove, Hammersmith.

A Discussion on Influenza.

The PRESIDENT: The Council of the Society thought it would be profitable to hold a discussion on influenza on wide lines, and I shall ask Dr. Seymour Taylor to give us some opening remarks. I hope that afterwards we shall get the views of many of the members present, who can give us a great deal of information on the subject.

Dr. SEYMOUR TAYLOR: Mr. President and gentlemen,—when I received an intimation through our Honorary Secretary that I should be requested to open this discussion, that intimation—coming of course from you vicariously—amounted to a command. And I accepted this invitation with the eagerness which belongs to us all who have not quite arrived at senility. But when I came to look through the literature of the subject I was amazed at the profundity of my ignorance, and it only showed me what a deal I had to learn. It is only when one has to get up a subject that one realises the small amount of knowledge that one has. This disease known as Influenza is one of many characteristics; it is protean in its types. As is well enough known, it occurs in epidemics, which are widely spread and of long duration; but, on the other hand, with wide intervals. Therefore, at any given outbreak of influenza it necessarily follows—seeing the wide interval—that but few people are immune to the disease; fresh generations have sprung up since the last epidemic or pandemic, and it naturally follows that the populace of any country is not, for the most part, immune at the origin of an epidemic of this terrible disease. Further, the characteristics of the disease at the beginning of an epidemic are entirely different from those at the end. That is to say, the fever at its onset has certain characteristic symptoms which, having once been recognised, are easy to discern and to distinguish in most cases. At that period we may say the epidemic is "running true." It comes on, for the most part, in cold weather, in cold seasons, especially when the weather begins to break—at the end of a frost. In one or two years I have been able to prognosticate an outbreak or a recrudescence of the disease at a period when there were but few cases occurring, that period being characterised by frost of more or less intensity, and possibly dryness of the atmosphere, followed by a cold thaw.

I will be as brief as I can in speaking of the characteristic symptoms of the disease, but I must mention them so as to draw attention to the so-called varieties of influenza, and also the sequelæ. If I were to say what were the main characteristics of this fever I should say, apart from the febrility—which is very, very sudden, lasting three or four days, and going down

almost as suddenly as it came—they are pains in different parts of the body, headache, backache, pain in the thighs, and notably, for some reason which I do not understand, pains in the lower third of the femur, immediately above the patella. Another characteristic is eyeball pain. The patient complains that pressure on the eyeball causes distress. There is also marked mental depression, and a peculiar expression of countenance, which is heavy and drunken-looking. In addition, there are certain signs of catarrh of the respiratory tract. Yet, despite these groups of symptoms, I have told you that the disease is protean in its aspect, and that is the word which Osler uses. There may be all sorts of varieties. I hold that the varieties of a disease are dependent not upon the poison at all, but upon the soil on which it falls. That is no new theory. If we look at the lower animals—fishes notably—we see that they vary. Although probably owning the same ancestors, they will vary in appearance, in colour, in shape, according to their environment. This is notably so, I am told, in the case of the flat fishes. I know it is true also of salmonidæ. Trouts taken from one stream and imported to another stream with a different environment from the parent river will, in the course of a few weeks—certainly of months—entirely change in characteristics, in colours, spot, form, and shape. Similarly we may say in the vegetable world. Such a common vegetable as the potato transplanted to another soil differing from that in which it was reared, will assume characters totally different from the parent tuber from which it sprang. Similarly with regard to fever; the influenza will vary entirely according to the soil on which it falls. I contend there is no difference in the poison if there is any difference in the type of the fever, and what difference there is, I think, is due to the soil on which it falls. Bearing this in mind, it must necessarily follow that many cases occur in which there is a mistaken diagnosis in this disease. That is to say, mistakes of commission, in which a certain disease has been labelled as influenza when probably it was not influenza; and other cases which probably were influenza but have not been recognised, simply owing to the peculiarity of the individual who has received the poison. In addition to that, there are many cases in which there is undoubtedly a mixed infection; that is to say, in the cold season of the year, when there are catarrhal affections of the nose and respiratory passages there may be influenza added. You may say, why does this patient not get better after being in the house for two or three days? There is marked depression, and more aching of the limbs than is usually associated with cold. I think those are cases

of mixed infection, where the poison of the cold has mixed with the poison of influenza, and the two are running side by side in the same individuals. Again, you may have a case in which influenza is running its due course, apparently, and you do not know why a patient shall develop typical lobar pneumonia, or, more frequently, catarrhal, at the same time. Here there is a probability that there is not only infection by the bacillus of influenza, but also of the coccus of pneumonia. The chief characteristic of influenza, as far as I have seen, is that all these types are characterised for the most part by an affection of the nervous system. If I were asked to write a definition of influenza, I should say it is a specific fever characterised by pains in the limbs, catarrhal affections of the respiratory tract, and (especially this) great depression of the nervous system. In other words, it is an affection which is marked by some form of neurosis. Therefore it looks as if it is a disease of somewhat similar features to that terrible epidemic disease which, happily, we now never see—typhus fever, one which is marked by the same drunken, heavy aspect, flushed face, great mental depression, and other nervous symptoms. According to most authors, there are five types or varieties of this disease. Three I have taken from the most competent authorities, the other two I have added. There is a neurotic type of influenza, which is characterised chiefly by pains, but which may also be marked by an inflammatory affection of the brain and spinal cord, especially meningitis. The actual structure of the spinal cord may be the seat of inflammation, and the bacillus can be found in, and cultivated from, the spinal column in suitable media.

The second great group is the pulmonary, in which bronchitis is the principal pulmonary affection. But in addition you may have acute pneumonia, often of the lobar type, but more frequently catarrhal.

But there is another form of pneumonia, which is very difficult to treat. I cannot quite locate or label it, because it is a form of pneumonia which does not run its due course; it smoulders like a piece of brown paper, which goes out in one place and burns in another; so this disease affects different parts of the lung in the same way. One patient may have, as I say, a smouldering pneumonia as a patch in the right lung. You listen later with the stethoscope and find it has cleared up, but another patch is becoming evident, and may even run into the other; and a third patch may appear in the opposite lung. The patient, instead of suffering from a specific fever of five or six or seven days, is often the victim of a slow pneumonia, which may keep him in jeopardy

for a fortnight or more, because it is not the typical coccal pneumonia, apparently, of our classical text books.

The third group is the circulatory, in which there is a very rapid pulse, and sometimes a dilated heart, with, possibly, murmurs at the various orifices. That dilated heart is a condition which I would ask all my audience to carefully recognise and note. It has occurred to me many times to see patients suffering from influenza, with no previous history of rheumatism, or chorea, or the like, but with a loud murmur—whether it be at the mitral orifice or at the base—and an increased cardiac dulness, but no signs of pericardial friction at all. I contend there is no true valvulitis—I do not like the word, it is ugly—but it is in frequent use. The cardiac transverse dulness increased, the sounds lessened, and the impulse diffused, teaches me that he is suffering from dilated heart, and the cavities are so distended that the doors do not fit the doorway. The mitral valve may not fit, and there may be regurgitation. The aortic valve may not fit, due to the same cause. An obstructive murmur in both instances would suggest that the patient did suffer from an affection of the endocardium surrounding the valves. I do not say obstructive disease never occurs; but I say that in the majority of those cases of dilated heart attended by murmur, the murmur is not so much due to disease of valves as to widening of the cavity by dilatation; and if the patient is kept quietly in bed for weeks under the influence of strychnia or digitalis, there will eventually be a perfectly healthy state of the heart. This dilated heart is a condition which should be recognised as one of the frequent attendants on influenza.

The fourth group is one in which the patient is suffering purely from a febrile disease. Pains are not very pronounced, and there is no necessary affection of the heart; pulmonary symptoms are not very marked, but the patient suffers from pure fibrility, with headache. And after two or three days there is a fall of temperature, and the patient says he or she is well.

The fifth group concerns the gastro-intestinal canal; there is anorexia, vomiting, diarrhœa.

Now I will refer to the agenda paper, because I want to keep within the four corners of this discussion. And I come to complications. I would say the complications of this disease may be anything. If the victim has a weak point in his armour I know no disease—not even typhoid fever—which will find out that weakness so quickly as influenza will. You know that it is due to a specific bacillus known as Pfeiffer's bacillus. Take my own case. I have recently had an attack of influenza, and it has been the illness of my life-

time; and, thanks to the skill and attention of a dear friend of mine, who is not unknown in this Society, I am here and privileged to open this discussion to-night. In my case—possibly you may not know—I am the victim of pulmonary disease; that is to say I inherited from a number of generations a chronic bronchitic affection. The fever at once went to my respiratory tract and produced the most pronounced symptoms there; that is to say, I had pleurisy, I had bronchitis—which I knew—and then I ask you to make a diagnosis of a man who complained of fever, who had a burning patch in the interior of his right lung, who had rusty sputum, who had herpes on his upper lip, and who had knowledge that between one and two o'clock in the morning he was not talking good English, or at least was disconnected in his arguments. That is a brief outline of my own case. Further, on the fourth day I had a typical shiver, my temperature came down, and I knew I was well. I think anybody listening to me, with clinical knowledge, will say I had in the interior of my lung, where I felt the hot patch, some pneumonic consolidation. So if a man contracts this disease it will find out the weak points in his constitution. Another person may have a tendency to cardiac affection, and therefore will have an affection of his valves, or pericardium, or myocardium. And a third person may have a weakness of his gastro-intestinal tract; and you will find those patients are frequently subject to diarrhœa during the attack.

These remarks I will close by saying that there is no immunity conferred upon a patient by having an attack of influenza. Just as there is no immunity conferred upon a patient by an attack of ordinary catarrh, a specific disease, as was pointed out, I think, by Ransome, of Nottingham, so there is no immunity conferred by an attack of influenza. On the contrary, my experience is that a man, having suffered once from an attack of influenza, is rendered more prone to subsequent ones.

As regards the sequelæ, as I say, much will depend on the vulnerability of one's constitution. The neurotic will become more pronounced in his neurosis, and that type of patient is rather a source of trouble to the doctor and to his friends. He may become alcoholic; patients who would never dream of intemperance, now become the victims of alcohol. I can think of a distinguished physician, a leading counsel, learned in the law, a clergyman, all of whom have become subject to alcoholism after influenza. Referring to my own experience, when I got well—although I told you I belong to the pulmonary type, I suppose I must be somewhat neurotic as

well—I had a great craving for some stimulant. It has been a great lesson, and I caution anybody against throwing stones at any victim of influenza, and saying "Poor creature; he took to drink or the morphia habit." So the sequelæ will depend on the man's temperament. If he is of a neurotic temperament, the sequelæ will be those which have mainly affected the nervous system. If he belongs to the pulmonary group, the sequel may be pulmonary phthisis, or he may have bronchitis. If he belongs to the gastro-intestinal group, his digestive organs will be disturbed, and the distress may be so great as to be even fatal.

I ask for your indulgence, Sir, and that of the Society to be extended to me in the disjointed remarks which I have made in introducing this discussion. In looking through the literature of the subject, I wondered how I could introduce it under two hours. But I have taken these notes entirely from a digest of a large number of cases which I have seen and from the most recent literature of the subject on which I have been able to lay my hands. I thank you, gentlemen, for your very kind attention while I have unfolded to you, in this feeble way, the few remarks I had to offer.

The PRESIDENT: I think the Society owes its thanks to Dr. Seymour Taylor for the interesting opening he has made, and especially for his personal remarks, for these have an added interest. There are one or two points which I would rather like to introduce. I first take some exception to Dr. Taylor's remark that the varieties of influenza depend on the soil. That does not seem to be quite right. According to him, different people will get different attacks of influenza, whereas the general experience has been that during certain epidemics or parts of epidemics, every person has a similar type of the disease. The little variability there is seems to depend not so much on the soil in which the bacillus grows, but upon some other circumstances which are existent during the epidemic. With regard to types, my own personal experience naturally only includes one type of influenza, and that is the abdominal type. I have on several occasions been called to see patients with influenza, concerning an abdominal operation. Those cases have been exceedingly interesting, and they have always occurred during an epidemic. The patients have a high temperature and vomiting, and the vomiting is pretty severe. But there is no abdominal tenderness, nothing to point to any particular lesion in the abdomen. I have had one or two cases in which there has been some abdominal distension—the tongue was foul, and the pulse corresponded fairly well with the temperature. Of course that is the point to which I pay most

attention in the abdominal cases, the correspondence of pulse with temperature. If these correspond, usually there is no very severe abdominal lesion necessitating immediate operation. That is the type I should very much like to hear other people's experience upon. With regard to the sequelæ of influenza, there the surgeon has, perhaps, rather more experience, and as far as I have come across the cases, the sequelæ seem to be divisible into the affections of the throat and glands, nervous sequelæ, and what may be called surgical, which include bones and joints. I saw, the other day, a case shown as one of necrosis following influenza; it was necrosis of the sternum, and the man had what was supposed to be an ordinary attack of influenza. About a week afterwards the temperature again rose, and a fluctuating swelling was discovered over the centre of the sternum. After a short interval this was incised, and a sequestrum involving the whole of one portion of the sternum removed. Unfortunately, the pus was not examined bacteriologically, so there is nothing to prove that it was due to infection by the bacillus of influenza. I have a similar case in the hospital now, in which the patient was admitted ill, with a temperature of 103° or 104°. Shortly after he had pain in the knee—what was supposed to be a case of rheumatism. After an interval of two or three weeks, a swelling formed in the lower part of the thigh, in the popliteal space, and there was pus in it. On opening it, necrosis was found in the lower end of the femur, but it was not an ordinary acute osteomyelitis from staphylococcus aureus, because the culture taken from the pus showed simple streptococci. I was hoping influenza bacilli would be found in it, but nothing was found in that way, though careful search was made. My feeling about these sequelæ is, that their connection with influenza is rather a casual one, and that it simply means that influenza has so far diminished the vitality of the tissues as to enable these other various micro-organisms to develop and work their mischief. I hope we shall get a good discussion upon the various types and upon unusual sequelæ.

Dr. Hood has written to say he cannot come, so I will ask Dr. Saunders to continue the debate.

Dr. ARTHUR SAUNDERS: I should like first to say a word or two on the remarks just made by our President, as he has touched on some very important points. As regards the type of the attack, we recognise that influenza is a disease which, like others due to micro-organisms, tends to run, in its acute stage, a fairly uniform course, but that it may, even as typhoid may, either throughout an epidemic, at different times in an epidemic, or again in certain localities, exhibit a very

striking resemblance in the symptoms of those affected. But I think that this resemblance is traceable chiefly in the earlier symptoms of the attack, while the sequelæ are affected to a much more considerable extent by the idiosyncrasy of the person attacked. This may explain in part the divergence in opinion which has been suggested by the remarks of Dr. Seymour Taylor and our President. We have, as our President also remarked, to remember that many of the complications are not due to Pfeiffer's bacillus but to other micro-organisms, such as staphylococci, streptococci, the pneumococcus or the bacillus of typhoid fever or tubercle. These may find a suitable soil for their growth in the impaired tissues of a patient debilitated by influenza, or in a nidus provided by some definite spot at which the resistance has been still further lowered by some perhaps slight injury.

It is, however, upon the effect on the heart that I intended chiefly to dwell. I was much interested in our President's case of influenza presenting abdominal symptoms, where operation was negatived by the comparative slowness of the pulse. Many physicians have pointed out this comparative slowness as especially characteristic of the high fever at the beginning of the influenza attack, it being no uncommon thing for the temperature to be as high as 103°, while the pulse is but 80 to 90, and this relation has even been insisted upon as an aid in diagnosis. Later on, even in the milder cases, where the temperature has remained high but a day or two, when it sinks, as it usually does, to subnormal, the pulse rate may become very slow, often only between 40 or 50, though perhaps more commonly between 50 and 60. In severe cases, and especially in those in which the temperature has remained for long above normal, the pulse may become feeble, rapid and intermittent or irregular. In these cases dilatation of the cavities of the heart, to which Dr. Taylor has referred, is usually found to be present. Acute dilatation, resulting in death, may even occur, and this dramatic possibility has, I think, tended somewhat to distract attention from the minor degrees of dilatation—always serious—which are so often present. Some dilatation, in fact, occurs in all severe cases. This dilatation is dependent on the direct action of the influenza toxin upon the cardiac muscle, and though in some cases we may have to deal, as in severe diphtheria, with a neuritis of the vagus nerve, in by far the majority of cases it is the muscular substance of the heart which is affected.

When we come carefully to examine the heart in such cases, the cardiac impulse is seen to be rapid in action, diffuse, and freqnently to extend externally to the nipple line. Palpation and percussion show, from the extension of cardiac

dulness to the left and the displacement outwards of the apex beat, without alteration of the position of the right border of the heart dulness, that it is dilatation of the left ventricle that first occurs—the weakened heart muscle giving way under the greater intra-ventricular pressure on this side—though later on extension of the heart's dulness to the right and upwards, with possible pulsation in the third left intercostal space, may show that the right side of the heart is also affected.

On auscultation a systolic murmur, due to regurgitation through the dilated mitral orifice, may be present, replacing, accompanying or following the first sound; there may be, too, a persistent tachycardia, the first sound itself, when audible, being weak, flapping and irregular, while the diastolic pause may be considerably shortened. In cases where brachycardia is present, dilatation is usually slight only, and the diastolic pause is well sustained. In such cases it is probably the nervous mechanism which is usually at fault. Whether the heart-beat be rapid or slow, irregularity or intermittence are of frequent occurrence. This may take the form of a double beat followed by a pause, which may be accompanied by a feeling of faintness, or may even carry with it the very terror of death. Convalescence in the severer cases tends to drag on, and it is long before compensation becomes completely established. Rapid beating of the heart, with irregularity or intermittence, is liable to come on with but slight exertion, and this especially in the early morning or at the end of the day, in the one case as a rule because the patient has gone for long without food, in the other because the duties of the day, little as he may have done, have proved too severe a task.

Still, in these cases, under careful treatment,—rest, digitalis, and possibly strychnine injections in the early stages, tonics and gradual education of the heart later—recovery is usually complete. It is, as a rule, when patients are neglectful or ill-cared for that grave results occur. And it is especially in our own profession, where a man's work often compels him to return sooner than is wise, far sooner usually than he would allow in the case of a patient, that many very serious, even fatal, consequences, from cardiac syncope have occurred.

One is often asked with regard to the great prostration which follows an attack of influenza, "Is this due to the weakened action of the heart, or is it of nervous origin?"

As influenza is a disease which is accompanied in its acute stage by marked nervous manifestations, by delirium, high fever, and often definite symptoms referable to inflammation of the peripheral nerves, the spinal marrow, the meninges,

or the brain substance itself, it is obvious that in many cases it is due to the effect of the toxin upon the nervous system, —a true nervous prostration. In other cases, however, where the cardiac phenomena have been marked, where dilatation has occurred, or where a persistent tachycardia, brachycardia or arrhythmia is present, it is equally obvious that the enfeebled circulation is largely responsible; but in the majority of cases, when we remember that the poison has acted not only on the nervous system generally and on the cardiac muscle, but also on the nerves and ganglia on which the action of the latter depends, you will agree, I think, that our only correct answer could be, "It is due to both."

Dr. RUFENACHT WALTERS: I propose in my remarks to confine myself to matters within my own observation. In 1890 to 1900 I saw many cases of influenza, and since 1900 I have heard a great deal of it, but have seen very little of it, because I have been connected with an open-air sanatorium. One fact struck me during these earlier years—1899 to 1900—that the cases seemed to be more frequent in ill-ventilated houses, and when there was an ill-ventilated house with a case in it, the case was usually more severe than in ordinary cases. I have many times noticed that one or other member of an affected family whose occupation took him or her out of doors a great deal, suffered much less from the disease or escaped the disease altogether, whereas other members of the same household had the disease severely. As regards the type of disease, I can confirm what has been said by previous speakers as to the difference between one attack and another. I have had three attacks, the first short and sharp, and very severe. Inside twelve hours I was so weak that I could scarcely crawl upstairs to bed; but I was clear of it in five days. It left me weak but otherwise well. The other attacks were different, and the last was a much more lingering and long-drawn-out affair, which left me miserable for a fortnight or three weeks. I fancy the type of disease was rather different in the early '90's than it was in the later '90's, *i.e.*, the symptoms were more easily recognisable. There was sudden fever, and the fever came down promptly. I will not go into those details because they are well known to you. There are some attacks of illness which are extremely like those of influenza, but are not due to Pfeiffer's bacillus. I was called in consultation to meet Sir Lauder Brunton and another medical man over an old patient of mine who had been in Crooksbury Sanatorium for lung disease and had become extremely feverish with symptoms which caused anxiety. It struck all those who watched the case that it was rather different from

an ordinary aggravation of a pulmonary tuberculosis. The patient did not seem to be ill enough, and when one examined the chest, the differences in the physical signs were not sufficiently marked to give one the impression of its being due to aggravated pulmonary trouble. We all agreed that it must be due to some intercurrent ailment, possibly some form of influenza; and Sir Lauder Brunton called my attention to the fact that he had met with several cases in which these kind of symptoms had happened, and in which not the Pfeiffer bacillus, but a diplococcus had been found in the expectoration, apparently not an ordinary pneumococcus. He also said that if this should happen to be the case in this instance probably the extra fever would continue two or three weeks and then gradually subside. That is exactly what did take place. The expectoration was examined, not by myself, and a diplococcus was found; but the lady made a good recovery, except that the pulmonary disease had increased more than it was before.

With regard to the sequelæ, I think Mr. Bidwell has put that matter very well, that the attack of influenza opens the door to other infections, to other bacterial enemies. And I might call attention, in the first place, to one sequel, of which I saw several instances, and unfortunately was myself a sufferer; namely, catarrh of the antrum. I saw several cases of catarrh of the antrum of Highmore, leading sometimes to blocking of the opening, and very severe pain until the matter was able to find its way out. In my own case a surgical operation was necessary, and it greatly relieved but did not completely cure it. The operative sinus was allowed to close in two or three weeks, and I was assured that I should not be troubled with any return. I am sorry to say that has not been absolutely true, I have never quite lost the trouble, and I am still suffering from it. Another sequel which one often sees is a pulmonary one, and for the purposes of this discussion I analysed some of the cases which have been under my care at Crooksbury Sanatorium. I could not look through the notes of all of them, but I think 200 cases give an idea of the connection between the two diseases. I have taken them indiscriminately, without any sorting out. Of these 200 cases, 26, or 13 per cent. were clearly started by an attack of influenza. Possibly there were 12 more, but in them the evidence was not as conclusive. In 7 cases the pulmonary disease which had pre-existed was very much aggravated by the influenza, which led to a distinct relapse. In 14 cases I could not trace any influence of the influenza. In my opening remarks I said that since 1900 I had seen very few cases of influenza. It has been a very notable fact that

whereas one heard of many cases around Crooksbury Sanatorium, the cases which we had personally to deal with in the Sanatorium were extremely few and ill-marked. And I think one may fairly add to that a remark about treatment. It seems to me that some of the fundamental principles which guide one in the sanatorium treatment of pulmonary tuberculosis are extremely applicable in cases of influenza. I should think everybody is agreed that rest, especially rest in bed, is of very great importance in the early stages of influenza, and that plenty of good food is also a very valuable remedy. But the third, which is always used in a sanatorium, that of open windows, is, I am afraid, too often lost sight of. One finds too often that the room in which an influenza patient is being treated is allowed to be hot, and the windows are kept closed, or nearly so. I am sure, from my own experience, that that is a mistake, and I daresay many of those who are here present may be able to endorse my remarks in that respect.

Dr. W. Culver James: Sir, taking advantage of the description which Dr. Seymour Taylor gave to his most interesting remarks, with your permission I will make a few disjointed ones. I imagined, about 1890, when I think the epidemic was first noticed, that I had never seen a case of influenza at all. I had often heard of it in a most interesting manner from Sir Samuel Wilks. However, on looking back I am very much inclined to think that some of those cases which we used to describe as infective pneumonia, which were almost always fatal, and which occurred under almost all circumstances in very elderly people, were a few of those cases of influenza that still remained between the epidemic of thirty years ago, before one remembered anything of medicine, and those which occurred at the last epidemic, with which we are all so familiar. I would briefly refer to two cases. I remember two old ladies in one house being seized with symptoms of a broncho-pneumonic character. There was practically no rusty sputum, and one was supposed to have caught it from the other. The former was supposed to have had it from the water she was drinking. The water supply was examined. It occurred in Kensington, and it was found that the cistern from which they obtained water supplied, in the old-fashioned way, the w.c., and Dr. Goodhart, who saw the case, was under that impression. That occurred four or five years before we saw the first case of this last epidemic. Two years before that epidemic came on I saw a case which I now look back upon as being a typical case of broncho-pneumonia following influenza; in fact, two or three cases. In all cases the patients were over 75—one

was 83, and another about 84. The symptoms were almost identical, and I cannot help thinking that those few cases that many of us looked upon as infective pneumonia, and were called by that name, with very little rusty sputum—the patients dying off, and one feeling that one was powerless to save them—were influenza cases. I would suggest, Sir, that the gentle contradiction which you gave to Dr. Seymour Taylor was hardly a contradiction. You say that the differences in the cases do not depend on the differences of soil; and you go on to say that most of the cases occurring in the same season are very similar. I suggest that the soil is probably influenced by the season; and the soil, therefore, of those cases which are similar has as much to do with it as the poison, which may also be similar. By that I mean that the mere fact of various cases during a certain season being similar is just as likely to be due to the condition of the soil as to the similarity of the poison. Two or three years before the last epidemic I had influenza, and the remarks of Dr. Saunders remind me of it, for I regret to say I have not looked up a single line about it. I felt ill very suddenly. I was having luncheon, and I had to sit in a chair, and directly my guests were gone I took my temperature, and it was 101°. I was feeling exceedingly ill, and I crawled into bed. In the evening the fever had gone, and I went down and sat on a chair; and I remember hearing a noise, which I afterwards discovered was caused by my head striking the floor. My pulse went down to just below 50, and for several days I just panted quietly, drawing very long breaths, and being very anxious to have my head as low as I could get it. Dr. Goodhart kindly came to see me then, and I was very much struck with the acuteness of his observation. I thought it was due to blood poisoning caused by the drains at a hospital to which I was then attached. But he diagnosed it as catarrhal poisoning affecting the heart; and in looking back one cannot help thinking how very near he was to the truth. Not that I consider catarrhal poisoning is the same as influenza poisoning. I have seen a case somewhat similar, but I think only one. An American gentleman consulted me, and I diagnosed influenza and sent him home. Very shortly afterwards I was called to see him, and he was panting for breath, practically unconscious, with no pulse that I could feel, and everybody thought he was dying. Fortunately I raised his feet, lowered his head, administered stimulants, and he recovered. But I do not think one sees many of these cases. I think it is one in which the patient is snatched from death by immediate help. With regard to general treatment, I think there is no doubt, as Dr. Walters has said, that rest

and quiet are probably the most important. Fresh air also is necessary, but I quite disagree with him in regard to warmth; I think warmth is most important with the fresh air, especially if the respiraory organs are affected, and I think it adds enormously to the comfort. As to drugs, ammoniated tincture of quinine formerly was a very favourite remedy, but for a long time one has used natural salicylates, and I frequently include camphor, being careful to add to the salicylates, which do not bear ammonia well, something in the shape of nux vomica, and always bicarbonate of sodium. In administering alcohol, I follow the same rules that I apply to the treatment of other febrile diseases. The food I advise is of a light, digestible and very varied character, so that the stomach may be irritated as little as possible.

Mr. RICKARD LLOYD: I understood that when Dr. Seymour Taylor referred to the "soil" he meant the individual, but Dr. James appears to think he meant something else. I agree with you, Sir, that variety characterises an epidemic, rather than that the variety depends on the soil or on the environment. Variety is distinguished by the symptoms, and these depend to a great extent on the time at which the patient "caves in" or treats himself as an invalid. If patients would call in a doctor as soon as they feel feverish and ill, they would escape all these gastro-intestinal symptoms. There are one or two very prominent symptoms which are very useful in diagnosis, but have not been mentioned so far. One is an extremely dirty furred tongue which most patients have, and patients never seem to get better until the tongue begins to clean. I was rather surprised that Dr. Seymour Taylor did not refer to that very pronounced slowing of the heart often met with, and in my experience I would put the rate even slower than Dr. Saunders mentioned. I would say from 30 to 40, and I would especially like to mention one patient whom I saw, who was apparently in his own mind perfectly well. His age was 36, and his pulse rate was 36. I mention it because it has always been a warning to me in regard to patients whose pulses are abnormally small and take days and weeks to recover. That patient died sitting in a club two years afterwards. So when I have a patient who shows such circulatory feebleness, and whose circulation it is difficult to rouse, even by large doses of ammonia and strychnine—digitalis I always avoid in cases of slow heart because it is said to increase the long pause of the heart—I give a poor prognosis. Quite recently a patient had a pulse of 42 for a fortnight, although he was taking 10 grs. of carbonate of ammonia every four hours, and all the food his wife could get him to take. He went away with this pulse of 42 to the country, because I believe change of air,

especially to sea air, and going about in a Bath chair, or even lying down in the open air at seaside places, is very beneficial. But personally, I object to patients going about until their pulse-rate has increased to 70. There is so much in the subject that I will leave any further points for subsequent speakers.

Dr. W. A. BONNEY: I should like to ask a question, Sir. In my neighbourhood influenza seems to be almost persistent. Certainly we have had it with us at Chelsea for the last seven or eight months, and not only during that time, but also during all the previous epidemics, and I think I am the senior practitioner in that neighbourhood. I have noticed one symptom which has not been alluded to to-night, namely, a peculiar appearance of the palate, an inflammation of the soft palate, extending forward towards the teeth; it generally assumes a pyramidal form, so that whilst in the lower portion of the velum palati it occupies the whole width, it tails off in the shape of a pyramid as it comes forward on to the hard palate. And I have noticed a number of little shining spots, which I have found to be tiny vesicles. I think these are herpes, and this condition is marked, especially when the case has been a severe one. These vesicles appear on the second day, and they persist even after the patient is clamouring to go back to work again. I have no doubt that, as in my own case, one of the first things which patients complain of is that they have not only a racking headache, but a sore throat, and you often find that it is not the throat but the palate which is inflamed. I have always thought these people have inhaled such a mass of these germs, whatever they may be, that they have stopped upon the first favourable surface. And nose-breathers, who ordinarily keep their mouths shut, get very severe inflammation along the floor of the nose. I should like to hear whether others have observed this, because I have come on purpose to pick up some hints as to treatment. I have not been able to improve my original treatment, which was carbonate of soda and salicylate of sodium; and I should like to know from this enlightened circle whether there is anything better. I confess that with regard to the terrible mischief which I have seen in cardiac inhibitions, one death, and several persons apparently permanently injured by severe influenza, I have never yet been able to discover any remedy which helped them, except, perhaps, champagne, and that is not in the pharmacopœia.

Mr. H. CHAMBERS: I think it is necessary that we should limit ourselves to the sequelæ of this disease. Some gentlemen have mentioned particularly the onset of the disease and the symptoms accompanying it. Among the most important things which strike one are the nervous sequelæ, and a special

point in regard to them is their latency. One sees an attack of influenza apparently quite recovered from, but several weeks, or perhaps months, later, the patient presents the symptoms of breakdown — neurasthenia. This fact is of especial importance in relation to life assurance—how long after influenza should a life be accepted as a first-class one? I think certainly three or four months should elapse after apparent convalescence before the life is accepted as a first-class one. There are so many speakers who want to discuss the subject that I will not take up your time further.

Dr. RAMSEY MORGAN: I was surprised at the large mortality from influenza; but in several cases I know of the disease closely preceded an attack of phthisis. In the cases which came under my own observation at Bournemouth, 60 per cent. of the consumptive cases gave a clear history of influenza. No doubt many people go there who have, or have had, influenza, and some at the very last stage, and the disease is very prevalent at Bournemouth. But it is surprising that very few of them get better. Another sequel to influenza is a laryngeal condition, the peculiar cough which patients have when the influenza is passing away, a cough which is often mistaken for whooping-cough. It is not unlike the cough met with in children who have their bronchial glands affected.

Dr. STANLEY SMITH: We have all, I think, been puzzled to account for the numerous cases of neuritis that have occurred in the last few years in comparison with the paucity of cases in previous years. I can remember as far back as 1877 or 1878, and my impression is that before 1890 there were but few cases of what we now call neuritis. I want to suggest that the fact that influenza has such a great influence on the nervous system may be, in part at least, a reason for this. That is, is not neuritis, as we see it so frequently nowadays, a remote sequel of influenza? I think in many cases we can trace it to an attack of influenza. I was disappointed not to hear hints about treatment from Dr. Taylor. One can comfort the patient very much in the first twenty-four hours by giving salicylate of soda with bromide. That should not be given for more than thirty-six hours, and it should be followed speedily by a germicide, carbolic acid or sulphocarbolates with nux vomica, or strychnia, and should in most cases be accompanied from the beginning by alcoholic stimulants. As to germicides, that is very important. Several serious complications I have seen I believe were caused by the foul state of the mouth; there were two or three cases of very acute parotitis, coming on shortly after influenza, and several with acute otitis media. One old gentleman, aged 84, started his attack on his own doorstep by diarrhœa. He was very ill

and faint and his tongue was very foul, and three days later he developed a severe parotitis, which nearly killed him. I believe such complications can be prevented or modified by careful cleansing of the mouth.

Dr. F. CROOKSHANK: I think, Mr. President, that we have taken a rather wide and generous view of what influenza is. We have heard but little attempt at defining what it is and how it can best be recognised. Dr. Lloyd suggested as a diagnostic point that the tongue was furred at the beginning of it, and that the tongue cleans as the patient gets better. I have noticed for a number of years in a large number of patients that when the tongue has been clean the patient has been better, but it has not occurred to me that those patients have necessarily had influenza. When one hears of influenza being unduly prevalent in a district, one finds often that what is prevalent is the idea in the doctors' minds; for in many of the cases I have heard I do not see the connection they may have with influenza. With regard to the sequelæ of influenza, I do not dispute that pneumonia, and sometimes typhoid — which has not been mentioned — and sometimes phthisis, do follow influenza. But I think if we put on one side those cases in which the relation between influenza and pneumonia, or influenza and phthisis, is one of coincidence and not *propter hoc*, that out of the residuum there are some cases in which our diagnosis is at fault, and that they are not caused by Pfeiffer's bacillus. I have made the mistake often myself; but influenza is a convenient thing to tell relatives when you find the temperature running up, especially if one knows that in the event of other symptoms occurring, one can say that pneumonia is a frequent sequel of influenza. I do not know that I have always ventured to confess it to the patient, or his relatives, but I confess it to myself and to this meeting that frequently one sees a patient whose temperature rises, and one says he has influenza. In a few days physical signs appear, and in those cases I think it is not pneumonia following influenza, but that there was a central patch of pneumonia, the signs of which only just came out, and the diagnosis of influenza should not have been made. So I suggest that in diagnosing influenza we should have some regard to the natural definition of the disease, and should not extend it in the rather generous way in which it has been by some speakers to-night.

Mr. F. G. LLOYD: I agree with Dr. Seymour Taylor when he says that influenza is essentially protean in character. In the bad epidemic which we had I performed many *post-mortem* examinations, and it was evident from them that the disease was protean; sometimes the brain, sometimes the heart, some-

times the lung, and sometimes the bladder, and sometimes the kidney were specially affected. I take it that in these different stages of the same disease we would treat the symptoms; and I have found rest, diet, and stimulants of very great value, in combination with such things as quinine and salicylates.

Dr. LEONARD DOBSON: This is such an extremely wide subject that I do not quite know where to begin. I cannot agree with Dr. Crookshank in his limitations of the prevalence of influenza; you cannot limit it if you have had experience of the 1890 to 1896 epidemics. One can say from experience that in the early days we had epidemics which were much more true to type than they are at present; we had the abdominal type and the respiratory type; we had the type where every patient showed intense melancholia and profound depression after the attack, and a very nasty type it was. The present epidemics, following the usual law, are not nearly so typical. I also agree with Dr. Stanley Smith, who suggested that we have had a great deal more neuritis since influenza appeared than we heard of before. I allude especially to musculo-spiral neuritis, of which I saw very few cases before 1890; yet how frequently now one sees cases of musculo-spiral neuritis, running down the arm, accompanied by sweating of the hand at one time, and coldness at another, with intense pain, more especially at night. And there is great difficulty in treating it all successfully. If someone could bring forward to-night a reliable treatment for some of the sequelæ of influenza—one for musculo-spiral neuritis, and that neuritis which spreads up the back and the neck; another for the typical cough, which has been likened to whooping cough or nerve cough, we should be very much more successful practitioners than we are. For the neuritis I have tried everything I can think of, and the only thing I can recommend of any use is the high-frequency electrical current. This, if persisted in, will cure nearly every case of musculo-spiral neuritis which you may come across. In some cases there has been marked benefit after two or three sittings. I have had cases sent to me which have been cured almost as if by magic by high-frequency currents, but others have had a large number of sittings before success has been assured. I have tried hot-air baths, massage, and all forms of tonics, but the pain has gone on, and has been so intense as almost to drive the patient mad. Now with regard to the cough: has anyone found anything which will stop that whooping cough, as it has been called, following influenza? We have all met with it over and over again, the typical laryngeal cough which comes on in paroxysms, with short, sharp expirations, which will wake a patient up in the night and cause him to cough until he is absolutely exhausted, and

then will disappear for a couple of hours, only to commence again. This cough is exceedingly difficult to treat, the best combination of drugs I know of being heroine and glycerine, with perhaps a little syrup of Virginian prune. The ordinary cough medicines are useless. I quite agree with those who think we get one set of symptoms at one time, and another class at another time, but I think the peculiar idiosyncrasy of the patient comes out well in the sequelæ. In speaking of sequelæ, another point comes to my mind which I have often noticed, and that is, that sequelæ are very much more severe with patients who have been treated with coal tar medicines at the commencement of the attack. It is a very great temptation for medical men to give phenacetine and antipyrine in its early stages, because they so soon bring down the temperature and give the patient comfort and ease. But I have asked many men how they treated their patients, and I am sure, from their answers, that those who gave antipyrine and phenacetine were the men who had the largest percentage of patients with heart trouble and pneumonia afterwards. There has been much allusion to the damaged heart of influenza, and to the time which it takes to recover from this damage. I suggest that you will find that digitalis is not a good drug to give for these slow hearts; you will do better by giving regular hypodermic injections of strychnine and large doses of caffein, which is better than digitalis for influenza, and if you can get your patient to take the trouble, short periods of inhalation of oxygen are most useful. If the patient has a slow pulse and the smallest exertion causes him to go grey in the face, you will find that oxygen inhalations will pull the pulse up very materially. The best treatment for these people with damaged influenzal hearts is the high-frequency current. After a sitting of from ten to twenty minutes you will find that a patient with a subnormal temperature and a pulse of 40 to 50, will have an improvement to 80, at which point it will stay practically the whole day; while continued treatment in this way will get him better in about half the time he otherwise would take.

Mr. R. POLLOCK: The vertigo that follows influenza has not yet been mentioned, and the only drug I have found good for it has been effervescing quinine, as recommended by Dr. Burney Yeo, and strychnia. Stimulants I generally order, but I have not noticed the inclination towards alcoholism which Dr. Seymour Taylor has mentioned. An American writer, Hare, recommends bromide for vertigo, but I have not satisfied myself that it does good. Good feeding is essential afterwards, but I believe digitalis should not be used in a case of slow heart, as it only intensifies the diastole. Strychnia is very

valuable. A bad taste in the mouth is common in influenza, and you can almost diagnose the condition by getting a smell from the breath. I have often noticed the vesicles at the back of the mouth which were mentioned; and some months ago it was stated in the *British Medical Journal* that vesicles were pathognomonic of influenza; but I have frequently noticed them in association with bronchial affections. And some time ago the same Journal mentioned a purple colour at the back of the mouth. But I do not know any one symptom which is absolutely certainly to be connected with influenza. One often meets with cases with a high temperature and great lassitude, about which one is not sure, but which is put down as influenza. It is quite true that when influenza is about, doctors and people's minds are saturated with it. I was frequently mistaken, especially where there was tonsilitis. You cannot be sure until you have watched the case for a day or two. But if the patient complains of giddiness it is almost certain to be influenza.

Dr. FURNISS POTTER; Acute suppurative otitis media is a common sequel (or, to be more correct, complication) of influenza. A striking feature of the acute middle ear inflammation associated with influenza is the tendency to involvement of the mastoid antrum and cells, with the formation of an acute mastoid abscess. In these cases there is frequently rapid and extensive destruction of bone. Quite recently while operating on a case, I was much struck by the great damage which had been wrought in a comparatively short time, much more than one would have imagined probable from the external appearances; in fact, it not infrequently happens that one finds the greater part of the mastoid process necrosed and friable, so that there is no necessity for the use of a chisel, but all that one has to do is to scoop out the softened *débris* with a sharp spoon.

Mr. PERCY DUNN: I trust, sir, that I shall not be regarded as an intruder by presuming to offer a few remarks upon this distinctly medical disease, medical, however, notwithstanding it still has some surgical aspects, and such of these as have come under my observation belong, of course, to the eye. My experience has taught me that the ocular manifestations of influenza can be classified under two heads, those which occur during the acute stages of the disease, and those which supervene during the convalescent period. Apart, however, from these the eye suffers in a manner which I believe to be characteristic so far as influenza is concerned. For example, a hypermetrope with a low degree of defect who hitherto has had sufficient accommodative power to maintain normal vision, suddenly finds that the vision has become deficient. Again,

early presbyopes whose ciliary muscle has been sufficiently active to overcome the defect, suddenly begin to realise that optical aid is necessary in order to enable them to read.

Furthermore, should the eye have been the seat of any antecedent inflammatory disease, an attack of influenza is very prone to lead to a recrudescence of the inflammation. Thus it is that a recurrent iritis may ensue, as well as a re-ulceration of the cornea. A broad line of distinction differentiates the ocular manifestations of influenza, according as they occur during the acute or convalescent period of the disease. That is to say, those belonging to the former class are generally most serious in their results. For not only may there be permanent destruction of the vision, but even the integrity of the organ as a whole may be imperilled. In so far as the latter condition is concerned some observers have recorded cases of panophthalmitis occurring in the course of an influenzal attack. I am happy, however, to say that no such ghastly catastrophe has come under my own observation. But the two most serious ocular diseases, one or other of which may occur in the acute stage of influenza, are optic neuritis and glaucoma. In both the onset generally occurs in the first few days of the influenzal attack. The former is usually ushered in by frontal and peri-orbital pain, the latter always by extremely acute pain in the eye itself and rapid loss of vision. The following case I may mention as illustrative of this latter condition. A single lady, about 45, was sent to me by Dr. De Vallancey for advice as to her right eye about five years ago. While living in the country she had found that the sight in the eye was gradually failing, the eye, moreover, occasionally became inflamed and tender. On examination I found the eye to be in a condition of absolute glaucoma. For some months it had been quite blind—I did a large upward iridectomy to relieve the stony tension, and after the eye had recovered, I did not see the patient again till about two months ago, when she was led into my room and gave the following history: The sight in the left eye had remained good till five weeks ago, when she was suddenly seized with a severe attack of influenza. On the third day of the disease the eye became acutely painful, the pain continued without relief being obtained, and after four days she found that the sight had quite gone; the pain gradually became less, and when I saw her the eye had quieted down, but nevertheless was in a condition of absolute glaucoma—as the other was—and was quite blind. I again did a large upward iridectomy, both to relieve the tension and to prevent, as far as possible, the recurrence of the pain. This treatment I believe to be sound, and the best in all cases of eyes in a

condition of absolute glaucoma. But the operation must be done as early as can be, for in all such eyes the glaucomatous process tends to progressive degeneration of the ocular tissues generally, and especially is this the case in regard to the blood vessels. The attempt to do an iridectomy upon an eye which has been blind for many years from glaucoma will almost certainly be followed by profuse intra-ocular hæmorrhage, requiring enucleation afterwards. In respect to the convalescent ocular manifestations of influenza they are for the most part of a trivial nature, that is to say, easily recoverable from without leaving any ill-effects. Among these are included phlyctenular conjunctivitis, keratitis punctata, scleritis, episcleritis, cyclopegia and convergent strabismus, comparable to that observed in diphtheria. Then there are muscular anomalies, due to partial paralysis of the cranial nerves distributed to the eye, and of the cervical sympathetic. So far as the cause of these paralyses are concerned, Osler says that, "Literature shows that almost every form of disease of the nervous system may follow influenza." Lastly, there is the question of the direct connection, if any, of all these ocular manifestations with the disease which we know as influenza. It is held by some that the disease is not accountable for any special ocular manifestation, and that those which do occur are merely the result of the extreme debility with which it is associated. We may, however, fairly contend that the influenza bacillus must have a distinct toxic influence in this regard, inasmuch as influenza is the only zymotic disease in connection with which such protean forms of ocular affections are met with.

Dr. SEYMOUR TAYLOR, in reply, said: I am pleased that my few remarks should have elicited such a varied type of discussion. I have no experience of the true abdominal type which you speak of, sir, but it is possible the contention may be true that people at certain periods of the year, or seasons, may suffer from abdominal conditions which lead to the abdominal type of influenza. I am glad my friend, Dr. Saunders, agrees with me that the dilatation of the heart is due to a toxine, and it is one of the most frequent sequelæ we may have to treat. Dr. Walters said that in the early decades the type was more regular than it is now. Of course that is true of every epidemic; it runs true, and then, as the population become affected, subsequent attacks shew a tendency to vary from the true type. The febrile type which he speaks of I should put under No. 4. He is right about a type existing in which there is febrility for a few weeks with no physical signs to account for it. I have recently had a young fellow who is in the Civil Service. Two dis-

tinguished physicians also saw him and agreed as to the absence of physical signs. But febrility had been present six months, and the authorities asked whether he would be able to resume his duty. After nine months rest he has gone back. Dr. Walters referred to the ill-ventilated rooms of patients suffering from influenza, and that is one of the difficulties the general practitioner has to contend with. Patients will not have the window open, there is such a terror of draught. The patient who transferred his disease to me was in a house which was filthy; a window was not known to have been open for eleven years, according to the doctor who knew the place. Dr. Lloyd spoke of brachycardia. I could not speak of all the symptoms, but I question whether it need be put apart from my group 3. It is a fairly common condition. I could not go so far as Dr. Bonny and say that herpes of the soft palate is a frequent association, though possibly it may be. A very important point was raised by Dr. Chambers, namely, neurasthenia, which may remain with the patient, even for six months after the influenza. Then he speaks of the relation of this condition to the insurance of the person's life. I think it is fair to say that if a man has had severe influenza it is not wise to even consider life assurance under a period of at least three months. Laryngeal symptoms I could have referred to. It is a singular thing that no matter when you apply the laryngoscope you will find no evidence of disease of the larynx. Several speakers have referred to neuritis, which has been common since the advent of influenza, and I think it is true that neuritis is common with influenza. But it is singular that all the speakers who have followed me to-night have wandered from the agenda paper for our discussion. They have gone into treatment more or less diffuse, and some of them more or less critical and accurate. And if this debate has been a successful one—as I think you will admit it has been—I suggest that for the coming session a debate would be still more successful if we were to put on the agenda paper for some evening "The Treatment of Influenza and its Sequelæ." From the tone of the remarks which many speakers made to-night, much information is wanted, and much information can be given.

I thank you for the kind way in which you have listened to my feeble efforts.

The Mirror of Practice.

THREE CASES OF FIBRO-SARCOMA OF THE MUSCLES OF THE ABDOMINAL WALL.

By W. McAdam Eccles, M.S.Lond., F.R.C.S.Eng.

Assistant Surgeon, St. Bartholomew's Hospital; late Senior Assistant Surgeon, West London Hospital, &c.

I have, within a comparatively short period of time, had under my care three cases of fibro-sarcoma arising in muscles of the abdominal wall. These, I venture to think, are of sufficient interest to warrant their being recorded.

New growths of muscles are not common, although inflammatory effusions into muscular tissue are by no means rare. I have never before, as far as I can recollect, seen a fibro-sarcoma arising in a muscle of the abdominal wall.

Curiously enough all these three instances occurred in women between the ages of 26 and 37, and in all there was no distinct evidence of previous injury. The question of the origin of sarcoma in the tissue at the site of an old hæmatoma is one of some importance, and especially so when the frequency with which a hæmatoma of the muscles of the abdominal wall is remembered.

A sarcoma present in this region offers peculiar difficulties in its removal, and needs elaborate planning in order to eradicate it freely and yet leave intact the abdominal parietes. A fibro-sarcoma of a muscle does not seem to be of such malignancy as a round-celled growth, and consequently the prognosis after removal is distinctly more favourable.

Case 1.—A lady, aged 37, was brought to me in 1904, by Mr. S. Dukes Ashley, with the history that she had noticed for a few months a feeling of nausea, and some pain in the region of the stomach. More recently she had noticed a swelling to the left of the umbilicus. She had perhaps become somewhat thinner during the previous weeks. Recently she had had a good deal of strain from having to move into a new house, and had taken a very decided interest in the organisation of the garden, work not of an unusual character for her. She had had two children, the last one year and nine months previously; this labour had been somewhat difficult and the perineum had been badly torn. She was found to be decidedly thin, but otherwise healthy looking. On the left side of the abdominal wall was an elongated swelling reaching

from a finger's breadth above the umbilicus, downwards to half-way between that point and the level of the symphysis pubis. The skin was freely movable over it, but it was obviously within or fixed to the left rectus sheath. The lymphatic glands in both inguinal regions were easily felt, but were not larger on the left side. Various suggestions as to diagnosis had been made. It was thought the tumour might be an old hæmatoma, might be of an inflammatory nature, possibly gummatous, or might be a fibro-sarcoma. After a period of watching it was decided to explore the swelling. It was then found to be a growth starting from the deep surface of the anterior portion of the rectus sheath, infiltrating the superficial parts of the muscle, but not attacking the posterior part of its sheath. It was freely excised, together with a long broad strip of the rectus itself, and a considerable area of the anterior layers of the sheath. Some amount of difficulty was then experienced in bringing the edge of the oblique and transverse muscles just beyond the linea semilunaris inwards to fill in the gap. The wound healed well. Microscopically the tumour was a fibro-sarcoma. Eight months later I saw the patient again, and there was no indication of any recurrence nor any suggestion of a ventral hernia, and quite recently Mr. Ashley assures me that everything is still quite satisfactory, eighteen months after the operation.

Case 2.—A single woman, aged 26, who had been a cook, was admitted to St. Bartholomew's Hospital on March 7, 1906. For nearly a year she had noticed a swelling in the abdominal wall of the right iliac region, but it had not increased much, if at all, in size the last three months.

The tumour was situated above the outer half of Poupart's ligament on the right side. The skin was free over it, but the tumour appeared to be fixed to the muscles. There was no enlargement of the lymphatic glands. An oblique incision exposed a solid tumour, apparently springing from the origin of the internal oblique from Poupart's ligament. It was unattached towards the middle line, and was fairly easily removed. The peritoneum was incised in one place during the enucleation of the growth. The gap left in the abdominal wall was closed by bringing the outer edge of the rectus down to Poupart's ligament.

The wound healed well, and the patient left the hospital on March 31 with a sound abdominal wall. Recently Dr. Thomas of Welwyn has reported to me that she remains in a satisfactory condition. The growth was a typical spindle-celled fibro-sarcoma.

Case 3.—A married woman, aged 35, who had had three children, the last three years ago, was sent to me by Dr.

George Henderson. In October, 1905, six months before admission, she had noticed a swelling just internal to the anterior superior iliac spine of the left side. This had increased gradually in size up to a few weeks before seeking relief, since which time there had been a much more rapid enlargement.

She had lost a considerable amount of flesh the last few months. She presented a firm, non-elastic swelling in the abdominal wall, apparently attached to the periosteum near the left anterior superior iliac spine. The skin was slightly adherent to it. The inguinal glands on the left side were slightly enlarged. An incision exposed a growth, lying deep to the external oblique, and apparently springing from the origin of the internal oblique to the iliac spine. During the excision of the tumour the peritoneum was somewhat widely opened, necessitating the insertion of several sutures. The periosteum was removed with the attachment of the tumour to it. There was very great difficulty in closing the gap left, but in the end the cut abdominal muscles were brought together, and the wound healed well.

The patient was discharged on April 28, 1906, with a sound abdominal wall.

The growth was a typical fibro sarcoma.

TWO CASES OF FIBRO-SARCOMA OF THE ABDOMINAL WALL.

By Leonard A. Bidwell, F.R.C.S.

Surgeon to the West London Hospital.

Case 1.—A married woman, aged 36, was sent to me by Dr. E. Snape, in September, 1894. Eighteen months previously she had noticed a small lump in the right inguinal region, which had increased in size gradually, but more rapidly during the last six weeks. She had a normal confinement a year ago.

The patient was well nourished and rather stout. In the right inguinal region there was a tumour the size of a lemon, which was freely movable upwards and downwards but not laterally, and appeared to be in the layers of the abdominal wall. There was no impulse on coughing. It was nearly possible to get one's fingers round the tumour. There was an indistinct feeling of fluctuation in the tumour, so an exploring needle was inserted without any result.

On September 29, 1894, an incision was made over the tumour, which was found to occupy the inguinal canal. After

opening the inguinal canal the tumour was found to be in the fibres of the transversalis muscle, and to have spread from the aponeurosis of that muscle; the sub-peritoneal tissue was exposed after removal of the tumour and adjacent muscles. No enlarged glands were detected. The wound was then sutured in layers, and a firm cicatrix was left.

The patient made an uninterrupted recovery, and was seen ten years later in perfect health, without any sign of recurrence.

Sections of the tumour showed fibro-sarcoma.

CASE 2.—Mrs. H., aged 33, married nine years, and has five children. Miscarriage six months before, and is now two months pregnant. A lump was first noticed in the upper part of the abdomen in March, 1894, and it has been gradually increasing in size. It was about the size of a pear, and was situated in the upper part of the right rectus muscle; it had a hard, distinct edge, and was freely movable from side to side but not from above downwards. It could be lifted up from the abdominal wall. It was quite painless.

December 11, 1894, the patient was anasthetised and an incision made over the tumour, which was not exposed till the anterior sheath of the rectus had been divided, when the tumour was seen springing from the posterior sheath of the rectus, with the fibres of the rectus muscle spread over it; the muscle and fascia were divided freely at a distance from the tumour, and the growth removed. The abdominal wall was then closed with several layers of suture.

The patient made a good recovery and her pregnancy continued to term, and did not cause any weakness of the abdominal wall.

The tumour was the size of a small pear, and microscopical examination proved it to be a fibro-sarcoma.

Remarks.—These fibro-sarcomata of the abdominal wall are very rare, and though these two cases occurred in my practice within a few months of each other twelve years ago, I have not had another case since. The only difficulty in the diagnosis is to distinguish between these tumours and a gumma of the abdominal wall. The history of normal pregnancies and healthy children in both my cases put out of court the question of syphilis. In both cases the tumour seemed to have some relation to pregnancy. The tumours are of very slight malignancy, and after complete removal of the adjacent muscles, recurrence should not occur. In both cases the tumour started in the deep aponeuroses of the abdominal wall and not in the muscular tissue. The muscular fibres were rather pushed aside than infiltrated. There was no glandular enlargement in either case.

PARACENTESIS FOR PLEURAL AND PERICARDIAL EFFUSIONS.

By John Atkins, M.B., F.R.C.S.

K. C., a girl, aged 16, one of the few survivors of a large family with a marked tuberculous history, developed a moderately severe attack of rheumatic fever. Under treatment the joint-pains ceased in a few days, but the temperature did not fall, oscillating between 99° and 102°, accompanied by sharp, stabbing pains in the right side and some evidences of pleural effusion. As the physical signs of fluid became progressively more marked, the right chest was tapped and forty ounces of serous fluid removed. The signs in the right chest gradually diminished and the temperature became practically normal within a few days, but the patient developed a bruit of mitral regurgitation.

About five weeks from the commencement of the first attack the patient had a relapse of the rheumatic fever, and with the recurrence of the joint-pains complained of severe stabbing pains in the left side over the precordial area and extending thence to the posterior axillary border. She was very short of breath, with a temperature of 103°, pulse 160 and respiration-rate 54. A pleuritic rub could be heard at the left base behind, and soon the whole of the left chest became dull except at the top, and bronchial breathing could be heard in the second left intercostal space in front. The chest was tapped and twenty-six ounces of serous fluid removed. A bacteriological examination of this fluid was made and an ordinary white staphylococcus was obtained, but all attempts to demonstrate the presence of the rheumatic diplococcus failed.

When the heart was examined at the commencement of the relapse, no cardiac impulse was visible, but it could be felt best in the fifth space just to the left of the sternum. The precordial dulness extended from the second left space to the costal margin, and from 1½ inches to the right of the sternum to become merged in the dulness caused by the pleural effusion on the left side. On auscultation at the impulse, a loud systolic bruit could be heard, traceable outwards to the axilla, but no second sound. In the third right space there was a soft pericardial rub, which within the next four days was audible over the second and third right spaces and the greater part of the sternum, and by the fifth day all over the precordial area. It then became gradually fainter and more shuffling in character, the dulness extended on the left side, the epigastrium became distended, was very painful on pressure, and the patient was troubled with vomiting.

As the epigastric distension and tenderness increased within the next two days and the patient's condition became very grave, it was decided to tap the pericardium. The patient was supported by pillows in a semirecumbent position, the skin over the sixth left space, that is, the space below the situation of the impulse, was cleansed and then cocainised by hypodermic injection. A small snick was made in the skin with a scalpel, a most important preliminary, as it allows of the slow and careful introduction of the trocar and cannula, and obviates the necessity of a sharp plunge to overcome the resistance of the skin, a procedure of little import in paracentesis thoracis, but one to be carefully avoided in paracentesis pericardii. The trocar and cannula were slowly pushed backwards and slightly upwards towards the apex of the heart by means of a screw-like motion, just the point of the trocar being from time to time withdrawn so that the blunt end of the cannula could be employed to feel the part about to be penetrated. The trocar and cannula had been introduced about one inch when the apex of the heart was felt to strike against the end of the cannula from which the point of the trocar had been withdrawn. On removing this latter entirely no fluid escaped, so it was again introduced, and with the cannula pushed still more deeply with the same screw-like motion, but this time directly backwards and not upwards and backwards. After they had penetrated yet another inch the trocar could be felt impinging against a resistant membrane which was perforated by a short, sharp stab, and on the withdrawal of the trocar seven ounces of blood-stained serous fluid escaped, the end of the cannula being pushed so as to be behind the apex of the heart, which latter could be felt tapping it with each beat and imparting to it a rhythmic motion. The removal of the fluid was immediately followed by the disappearance of the epigastric distension and tenderness. The patient calmly watched the whole proceeding, felt scarcely any pain, and was in no way upset. An examination of the fluid showed it to be of neutral reaction, containing fourteen parts per thousand of albumen, some red blood corpuscles and a few pus cells.

The following day, when the patient was much better, a loud, harsh pericardial rub could be heard all along the right border of the sternum up to the second intercostal space and thence across the sternum to the second left space.

The patient had two more attacks of acute rheumatism, one a fortnight and another three months subsequently. Both passed off without further complications, and on the latter occasion I had the opportunity of carefully examining the chest to see the condition resulting from the pleural and pericardial effusions.

An examination of the lungs showed nothing except a remarkable increase in the loudness of the vesicular murmur over the sixth and seventh ribs behind, four inches to the left of the middle line.

The heart condition was as follows: The impulse was not visible and there was no epigastric pulsation. Systolic retraction could be seen in the second and third left spaces and the pulsation of the carotids in the neck was readily visible. A marked systolic thrill could be felt in the fifth left space and the closure of the pulmonary valves set up palpable vibration. The precordial dulness extended on the *left* from the clavicle to the lower border of the sixth rib, and externally two inches outside the nipple-line; on the *right*, from the second space to merge below in the liver dulness and extending two inches to the right of the sternum. A loud systolic bruit could be heard at the apex, traceable in all directions and readily heard over the greater part of the chest behind, but more especially just under the inferior angle of the left scapula. There was no pericardial rub.

I saw the patient once again, six months subsequently, but was not able to examine her heart. She had to go upstairs with care, but otherwise was able to carry out her duties as housemaid to the satisfaction of her mistress. The significance of this would increase tenfold to anyone acquainted with that lady.

A CASE OF ANGIO-NEUROTIC ŒDEMA.

By John Atkins, M.B., F.R.C.S.

A. M. C., aged 23, had been reading hard for the Bar up to March, 1905, and on passing his examination took one week's holiday and then again started reading, whereupon he was troubled, for the first time in his life, by the frequent return of food to the mouth after meals. This continued during the months of April and May, and on June 3, after retiring to bed about one a.m., he awoke at seven to find his scrotum considerably swollen. The swelling increased in size and by the end of the following day had invaded all the penis excepting the glans. It remained in this condition for twenty-four hours and then commenced to diminish, disappearing entirely within the next three days, the patient feeling quite well throughout the attack.

Eight days after the appearance of the swelling of the scrotum the patient noticed another on the anterior aspect of his right forearm, and the next day a similar one appeared

on the front of his left forearm, and this spread two inches above the elbow on to the arm. The swellings remained unaltered for two days when they began to disappear, lasting in all about five. During the attack the patient complained of feeling unwell, had "rheumatic" pains in the forearms where the swellings were, his motions were small and constipated, and he suffered from sharp colicky pains in the abdomen.

Exactly one week after the swelling had appeared in the right forearm, he experienced immediately after his breakfast a severe, throbbing pain just in front of the right ear, which pain ceased by midday. At four the same afternoon he noticed a slight swelling of the right eyelid which gradually increased in size, until by eight that evening he could scarcely see out of the eye. He went to bed and slept till midnight, when he was awakened by intense pain occasioned by the tension in the eyelids, so that further sleep was impossible, and by the next morning both eyes were practically closed, the right being the worse; here the swelling was as big as a hen's egg. During that night also the throat had swelled to such an extent that even the swallowing of saliva was difficult. In the course of the morning the right cheek swelled and this enlargement quickly spread to the forehead, down the left cheek, whence it invaded the lips, chin and neck. This state of things continued with diminishing severity for a week and then disappeared, the swelling of the chin and neck, however, persisting several days longer. Throughout this last attack the patient was confined to bed, and was for some time in a state of nervous prostration, and although on the lightest of diet was troubled by acute dyspepsia and regurgitation of food, accompanied by twitchings in various parts of the body, more especially of the extremities. This was the most severe attack during the whole course of the illness, but at regular intervals (varying from a day to a month) other definite circumscribed swellings have appeared on the face, neck, back, sides, perineum, scrotum, penis, buttocks and thighs, front and back of hands, and soles of the feet. The neck and chin are the parts most commonly affected, and then the patient presents a curious appearance of "double chin."

With respect to the swellings themselves, they usually appear and reach their maximum size in from six to twenty-four hours, and disappear within two to five days. As a rule their onset is preceded by no sensory symptom (except in the case mentioned above), although during the attack tingling and occasionally neuralgic pain occur. When they appear on the trunk and limbs they form rounded and definitely circumscribed elevations, sloping somewhat abruptly into the surrounding tissues, but with no definite raised edge. They vary consider-

ably in size, the largest occurring on the face and scrotum, those on the upper limbs usually measuring three or four inches square, and those on the back, sides, and thighs only half that size. The skin is elevated from a quarter to half an inch above the surrounding tissues, and the mass is of firm consistency and does not pit on pressure. In most instances there is no alteration in the appearance of the skin, although occasionally it shows a bright pinkish tinge—but only in those parts covered by clothes, and possibly the colour is due to the friction caused by them. On one occasion when the hand was swollen the skin was of a deep red hue. The temperature of the swollen part is usually subnormal.

The patient's general condition during the illness—which has lasted for twelve months—has been, on the whole, good. He is, and apparently always has been, of a distinctly nervous temperament, but suffers from no organic lesion. The temperature has continued normal throughout, the pulse regular though small, and the urine normal. He is troubled from time to time with colicky pains in the abdomen, attacks of dyspepsia, very occasionally nausea and vomiting, and until just recently with constant regurgitation of food.

The predisposing cause in this case seems to be the nervous temperament made worse by the close application to reading (eight to ten hours a day) for more than three years. Differing from most such cases, in spite of close enquiry, no evidence whatever can be obtaind of any other member of the family suffering from this complaint. There is, however, a strong neurotic element running through the family.

With respect to exciting causes, in nearly every instance when an attack has occurred, it has been preceded by acute indigestion, or certain unsuitable foods (such as salmon) have been eaten. In a small number of cases exposure to cold—more especially cold winds—and heat has led to an attack. For instance, the recent cold winds have led to swellings of the neck and lower part of the forearm; a drive in the rain was followed by swelling of the face; a journey over an eastern desert led to a severe attack in the eyelids; and walking through the hot bazaar at Damascus caused considerable enlargement of the soles of the feet. The close similarity between the exciting causes in this case and another of urticaria of the face, scalp and hands, is remarkable. Both patients suffered from a severe attack on the same day after being out while a bitterly cold east wind was blowing, and a little later both had an attack during the same week after eating salmon.

In spite of the fact that the patient has travelled and given up all professional duties for twelve months, no treatment has proved of any use.

Hospital Notes.

By A. Elliot, M.D.

Cases Illustrating Different Clinical Conditions Occurring in the Course of Mitral Stenosis.

Case 1. *Mitral Stenosis with Hæmoptysis.*—W. R., an errand boy, aged 16, was admitted to hospital on October 13th, 1905, complaining of cough and blood-spitting, from which he had suffered for about one week. The hæmoptysis was small in amount and intermittent, and was present on admission.

On examination the patient was found to be a pale, ill-nourished and badly-developed lad, looking younger than the age stated. His previous history was unimportant except for a complaint of somewhat indefinite "rheumatic" pains in the limbs. He had never had acute rheumatism, and there was no family history of tuberculosis. The lungs showed signs of general bronchitis, but no apical or other localised lesion suggesting tuberculous infection. The examination of the sputum for *Bacillus tuberculosis* was negative. The heart was enlarged, the transverse dulness extending from one inch to the right of the right sternal margin to one and a half inches to the left of the left nipple line. On auscultation a well-marked rough presystolic murmur was heard at the apex, running up to a sharply accentuated first sound, and not conducted into the axilla. Under treatment improvement was noted in a few days, but unfortunately the patient became dissatisfied with hospital restrictions, and discharged himself before recovery was established.

Case 2. *Mitral Stenosis with Peripheral Embolism.*—A. M., aged 17, a footman, was sent into hospital for an affection of the eye. He stated that while riding a bicycle some hours previously, he had suddenly become blind, and had fallen from his bicycle. On getting up he found that while he could see with his left eye, the right was completely blind.

The ophthalmoscopic appearances were those of embolism of the central artery of the retina. Careful physical examination showed no signs of disease except in the cardio-vascular system, where the following changes were noted:—The heart was enlarged, especially to the right, the area of dulness extending from one inch to the right of the right sternal margin to the left nipple line. The apex beat was unusually distinct to palpation, but there was no thrill. The first sound at the apex was accentuated and was roughened, and there was marked accentuation of the second sound at the pulmonary base. It is only right to state that the

diagnosis of mitral stenosis in this case, especially in the absence of the characteristic presystolic murmur, was not considered justifiable by all who examined the patient, but the consensus of opinion appeared to favour the view that stenosis was certainly present. The case is chiefly of interest from the fact that the patient showed none of the usual symptoms of cardiac disease, and was able to indulge in moderately hard exercise without discomfort. It was not until an investigation of the possible causes of the peripheral embolism revealed the presence of a valvular lesion that the cardiac condition was discovered.

CASE 3. *Mitral Stenosis with severe Angina Pectoris.*—A. N., aged 48, an unmarried woman, was admitted to hospital in a condition of severe cardiac embarrassment on February 20, 1905. She had been laid up for some weeks by acute rheumatism ten years previously, and since that time had suffered on and off from cardiac troubles, necessitating prolonged attendance as out-patient, and on two occasions residence as in-patient at another hospital. Previous to that illness she had enjoyed good health. She stated that her symptoms had been much aggravated during the week before her admission to hospital.

On admission she was very ill. Cyanosis, dyspnœa and orthopnœa were marked. There was almost constant cough and retching, and she complained of pain over the precordium and in the back to the left of the middle line. There was some œdema of the legs, and a slight amount of ascites. The pulse was noted at "about 154" and was very irregular in force and frequency, many of the cardiac beats failing to reach the wrist. Prolonged examination of the chest was impossible, but the following points were noted:—The heart was enlarged both to the right and left side; the apex beat was diffuse and feeble; the first apical sound was loud and sharp, and a murmur, systolic in time, could be traced from the apex beat to the right as far as the middle line. The lungs showed bronchial catarrh only. After venesection, digitaline hypodermically, and stimulation by brandy the patient rallied, and next day was much more comfortable. The cough was less frequent, the colour better, and the pulse-rate was slowing. A few days later a minute examination of the heart was possible, and showed an extent of cardiac dulness from one and a half inches to the right of the right sternal margin to four inches to the left of the left nipple line. There was a distinct palpable thrill over the apex, and in this region a long rumbling presystolic murmur was audible, running up to a sharp and accentuated first sound. To the right of the apex beat, as far as the middle line, the systolic murmur

above noted was very distinct, and was doubtless produced at the tricuspid orifice. A faint diastolic murmur was occasionally heard at the base and down the sternum. This was detected only on two other occasions during the whole course of the illness. The pulse had fallen to 100—110 per minute, and nearly all the heart-beats could be felt in the radial artery. The secretion of urine was normal in amount, and the œdema of the legs had cleared up. There was still some ascites. This afterwards decreased considerably and a large fibroid uterus could be felt rising out of the pelvis.

About this time the patient began to suffer from anginal attacks. These occurred on many occasions, lasting for a few minutes as a rule, but sometimes as long as a quarter of an hour. Occasionally a series of short attacks followed each other in rapid succession. The *breast-pang* was of great intensity, and was accompanied by absolute fixation, and generally by facial pallor. *Anguor animi* was a distressing feature in many of the attacks. Muscular effort, or more commonly flatulent dyspepsia, acted as an exciting cause. Inhalation of amyl nitrite relieved promptly in the earlier seizures, but afterwards seemed to lose its effect and morphia had to be given. This, too, failed after a time, and the spasm was only relieved by chloroform inhalation. During one attack—the most prolonged, but not the most severe of all—relief was not obtained until venesection had been performed.

This symptom rendered the treatment of the case a matter of great difficulty. Lowering of the blood pressure by the nitrite series relieved the angina, but if carried too far resulted in recurrence of, or increase in, the œdema and ascites. Digitalis and the like cleared up the œdema, but if persisted in were followed by fresh attacks of angina.

After five months' residence in hospital, the patient was able to sit up in a chair for an hour in the evening, but the improvement lasted only for a short time. In September she had an attack of acute tonsillitis, followed by rheumatic swelling and pain in the joints, and a few weeks later a new train of symptoms, which proved to be terminal, set in. This final stage was ushered in by a sudden rise of temperature (on October 4), together with rigors. The respirations ranged between 30 and 40 per minute, and there was troublesome cough with occasional blood-stained sputa. Rhonchi and sibili appeared over both lungs, followed by moist sounds. The strength progressively declined, mild delirium set in, and the patient died on November 4.

Post-mortem examination showed acute miliary tuberculosis of both lungs, and a few scattered tubercles were found in the

kidneys and spleen. The mitral cusps were thickened and almost cartilaginous in parts. Their edges were fused, forming a funnel-shaped opening admitting the tip of the finger only. There was atheroma of the first degree at the bases of the aortic cusps, and the orifice was slightly dilated. Both pulmonary and tricuspid orifices were larger than natural. All the cavities of the heart were somewhat dilated and their walls hypertrophied in varying degree.

CASE 4. *Mitral Stenosis with Pseudo-Angina Pectoris.*—M. P., aged 54, a widow, was admitted to hospital on January 1, 1905, complaining of dyspnœa, palpitation and pain in the chest. She had had acute rheumatism ten years previously, and again five years later, and her heart was known to be affected in the first attack. There was a doubtful history of syphilis at 40, but otherwise nothing of special note in her previous history. Rheumatism, tuberculosis and diabetes had occurred among her immediate relatives. On admission patient was slightly jaundiced and the remains of an old-standing skin affection were still visible. There was slight œdema of the legs. The cardiac dulness extended a little beyond the right sternal margin, and at the apex a long rumbling murmur was audible, filling up the greater part of the diastolic period, becoming rough and harsh and ending in a sharp snapping first sound. The pulse varied from 75 to 85 per minute, and was small and regular, without increase of tension. The murmur gradually lessened in intensity and duration, and finally disappeared, except just before the occurrence of the first sound, which retained its exaggerated snapping character.

During her stay in hospital this patient was subject to frequent anginoid attacks. The pain was precordial in situation, and extended "through to the back" and down the left arm as far as the fingers. But the whole seizure differed very markedly from those described in the previous case. It lasted much longer, and though apparently very severe, seemed to occur spontaneously, without obvious exciting cause. There was no alteration in colour, and no alteration in the frequency or character of the pulse. There was no fixation—indeed, the patient at times threw herself about in bed—and the element of *angor animi* appeared to be completely absent. Further, the patient was highly emotional, and the whole clinical phenomena of the attacks suggested the spurious rather than the true form of angina.

The seizures lessened in frequency and in severity, and the patient was discharged, after five weeks' treatment, in a comparatively satisfactory condition.

She was readmitted in July of the same year in precisely

the same condition as that detailed above, and exactly the same changes were noted. The murmur, long and rumbling and audible throughout the whole of the diastole, gradually disappeared, leaving only a short, rough, definitely presystolic bruit, which ended in the characteristic first sound. The anginoid attacks on this occasion were much less severe and much less frequent, but preserved the same character as on the first occasion. She remained in hospital for three weeks and left considerably improved.

CASE 5. *Extreme Mitral Stenosis, with severe Pulmonary Symptoms.*—H. F., aged 28, a hall porter, was admitted to hospital on March 4, 1905, suffering from dyspnœa and cough. He had had an attack of acute rheumatism at 15, and since then had suffered from rheumatic pains on and off at frequent intervals. He had been subject for some years to winter cough, and was unable for any hard work on account of the shortness of breath induced thereby. His present illness had lasted ten days, the first symptoms being those of a severe cold. One of his sisters suffered from rheumatism, but otherwise the family history was unimportant.

On admission he was found to be a thin, poorly nourished and anæmic man, with considerable dyspnœa and constant cough, accompanied by scanty thick tenacious sputum. The lungs showed universal rhonchi and râles, the latter being most marked at the bases, together with prolonged wheezing expiration. The cardiac dulness was enlarged, both to the right and left side. A systolic murmur was heard over the tricuspid area, extending towards the left almost to the apex, but over the actual apex-beat the first sound was clear. A faint murmur was audible at the base, systolic in time, and with the maximum intensity over the second right costal cartilage. There was slight puffiness around both ankles, but no œdema of the legs and no ascites.

By the end of a week the general condition had considerably improved. The lungs were clearer, the cough was less frequent and the expectoration freer; the pulse, though still irregular, had fallen from 120 to about 70 per minute, and a distinct rumbling presystolic murmur could be heard at the apex, ending in a sharp first sound. The slight œdema noted on admission had disappeared.

For some six weeks there was little change. The lungs never quite cleared up, and the cough was still somewhat troublesome, but the patient could now lie down, and slept fairly well at night. The presystolic murmur was very distinct, and the tricuspid bruit had diminished. The right border of the heart was noted at this time as extending half an inch to the right of the sternum.

In the beginning of May, after he had been allowed to sit up for a few hours daily for some days, an attack of acute bronchitis supervened. The cough was constant and for a week blood-stained sputum was expectorated. The pulse again became rapid and irregular, the presystolic murmur disappeared and the right side of the heart dilated to one inch to the right of the sternum. The legs remained free from œdema throughout. The patient was extremely ill for several days, and was only kept going by frequent hypodermic injections of strychnine. On one occasion venesection was necessary.

At the end of a fortnight improvement set in. The cough decreased and the physical signs in the lungs began to lessen. The pulse improved, the presystolic murmur again became audible, as the right heart regained power and the dilatation lessened. On May 30 he sat up for the first time, and a month later was able to leave the hospital. The heart was then acting fairly well, but crepitations were audible over the bases of both lungs.

On July 24 he returned in a worse condition than before. Treatment was unavailing and he died within twenty-four hours of admission.

Post mortem, all the cavities of the heart were found to be dilated, and their walls hypertrophied. The mitral orifice showed an extreme grade of stenosis, admitting only the tip of the little finger, and surrounded by a dense fibro-calcareous ring. The tricuspid valves were thickened and hard, and the orifice contracted, and the aortic cusps showed the same thickening but to a less extent. There was marked congestion and œdema of the lungs, and a small amount of fluid in the peritoneal cavity.

CASE 6. *Mitral Stenosis. Early Stage.*—A. T., aged 12, a school girl, was admitted to hospital on May 12, 1905, suffering from acute rheumatism of mild grade. With the exception of an attack of measles she had been very healthy till her 11th year, when she had a bad attack of tonsillitis, and since that time she had suffered a good deal from "growing pains." For a month before admission she had complained of pain in the feet and ankles, and, later, in the arms, hands and back, but had been to school daily till three days before she came to hospital.

There was a marked family history of rheumatism. Her father had had acute rheumatism at 15, and several other relatives on both father's and mother's side had suffered from rheumatism in some form.

On admission both wrists were swollen and red and contained fluid. The knees and ankles were painful and swollen

but free from effusion. The temperature was 100°, and the pulse 120 per minute. The lungs and abdominal organs were natural. The cardiac dulness extended from the right border of the sternum to the left nipple line and was limited above by the third rib. The apex beat could be felt inside the nipple line. On auscultation a systolic murmur was heard at the apex, conducted well into the axilla, and a fainter systolic bruit could be detected over the pulmonary area. The second pulmonic sound was accentuated, and the second sound at the apex a little indefinite and probably reduplicated. This reduplication has become more marked and is now (the patient is still in hospital) most distinct, and is confined to the immediate region of the apex beat, and though there is as yet no palpable thrill and no indication of the characteristic presystolic bruit, there can be little doubt, especially in the light of the accentuation of the second pulmonic sound, that, as pointed out by Dr. Sansom and Dr. Cheadle, it indicates commencing stenosis of the mitral valve. The case will be carefully watched, and it may be possible, on some future occasion, to refer to further developments that may take place.

CASE 7.—*Mitral Stenosis. Terminal Stage.* Ellen M., aged 40, was admitted to hospital on May 13, 1906. She had had two attacks of acute rheumatism, nine and fifteen years previously, and the first of these had led to endocarditis. After the second attack she had shown from time to time symptoms of cardiac failure, such as dyspnœa, cough, and swelling of the legs and feet. For about four months previous to her coming to hospital there had been œdema of the legs, and she had been confined to bed for some three weeks.

On admission she was suffering from marked dyspnœa and orthopnœa. There was slight icterus, the legs and feet were very œdematous and there was a small amount of ascitic fluid in the peritoneal cavity. The lungs showed signs of general bronchial catarrh and were dull to percussion at the bases behind. In addition there was evidence of fluid in the right pleura, the dulness extending as high as the fourth rib in the front, and to the angle of the scapula behind. Over this dull area the breath sounds were much diminished, and the voice sounds were almost inaudible. The cardiac dulness began at the third rib above and extended laterally from one and a half inches to the right of the right sternal margin to two inches to the left of the left nipple line. The apex could be felt beating somewhat forcibly at the extreme left limit of this dulness. The heart's action was irregular in force and frequency, and a large proportion of the beats failed to reach the wrist. The rate was 95 to 100 per minute. On auscultation a loud systolic murmur was heard over the apex,

conducted well into the axilla, and a fainter systolic bruit could be made out over the base. The first sound at the apex could be heard, and the second was reduplicated. No presystolic murmur could be detected. The upper bruit of the liver was masked by the pleural fluid; the lower margin was felt to extend about two and a half inches below the costal margin. The spleen could not be felt. An appreciable amount of free fluid was noted in the peritoneal cavity. The urine was much diminished in quantity and contained albumen.

In spite of treatment the patient steadily lost ground. The œdema and ascites increased, attacks of heart-failure occurred on several occasions, delirium at night was constant, and death took place on May 23, ten days after admission to hospital. On *post-mortem* examination the pericardium was found to contain a considerable quantity of clear serous fluid. The left ventricle was only slightly dilated, the left auricle showed marked dilatation as well as hypertrophy. There was extreme contraction at the mitral valve, the orifice being surrounded by a dense fibro-calcareous ring, and admitting only a small lead pencil. There was distinct narrowing of the tricuspid orifice, the valve curtains showing evidence of old endocarditis. One of the aortic cusps was thickened and puckered. The right pleura contained 300 cc. of clear fluid, and a large amount was found in the peritoneal cavity.

This case is specially interesting from two points of view. The existence of mitral stenosis was considered probable from the enlargement of the right heart, and from the character of the first apical sound, but the characteristic murmur, as is usual in the terminal stage of this condition, was entirely absent. On the other hand, the existence of the pericardial effusion, from want of sufficient data, was unsuspected. The heart sounds were in no way obscured or muffled; the apex-beat was felt more than usually palpable at the extreme left limit of the cardiac dulness, and the presence of the fluid effusion in the right pleura precluded the possibility of delimiting the line of cardiac dulness in the fourth and fifth right interspace. Moreover, it is probable that the amount of fluid rapidly increased during the last hours of life, when, for obvious reasons, minute examination could not be carried out.

Reviews and Notices of Books.

WEBER ON THE PROLONGATION OF LIFE.[1]

HAVING carefully read through the 104 pages of which this volume consists we cannot conscientiously say that the author has added much to our knowledge of the subject with which he deals. The platitudes are abundant, and for the most part the advice given, however much it may be calculated to produce an impression upon patients, is not such as to commend itself to the practitioner. Let us take one instance at random. On page 78 the author discusses some remedies against sleeplessness, in the course of which he says, "a wet bandage round the stomach at bedtime is a good remedy against imperfect sleep." We should have liked the author to have been more explicit about this remedy, and to have told us how long the bandage could be expected to keep wet, whether it is made wet with cold or hot water, and whether any remarks have been recorded by patients who have tried the remedy. But a wet bandage appears to be a useful thing in other ways. On page 64 we learn that if worn round the stomach and loins, during the night, "it is likewise often a successful measure" against constipation. We would suggest that it perhaps would be more convenient to sleep in a damp bed, but possibly, however, this might be a little too active on the bowels, and bring on an attack of diarrhœa. Again, on page 61 we read that "snuff is out of fashion at present, but to some people suffering from chronic catarrh of the nose, with insufficient secretion of mucus, a pinch taken once or twice a day is useful by increasing the discharge, and rendering the breathing through the nose more easy . . . . It seems to act by its stimulation as a species of gymnastics on the capillaries of the schneiderian membrane." And yet, nowadays, "some people" with chronic nasal catarrh, are quite satisfied to consult a nasal surgeon and be cured without resorting to "snuff." Again, on the same page we read "many old doctors maintained that snuff-taking was a good practice against some forms of frontal headache and blear eyes (*sic*), and this not without reason," adds the author. Prodigious! Every ophthalmic surgeon knows, and many a practitioner, that frontal headache and blear eyes are the classical signs of some error of refraction. There is no wonder that "snuff is out of fashion at present," if the above are examples in which its use by the "physician" can be recommended.

All that the author states and quotes upon the subject of the injuriousness of alcohol is quite to the point and valuable, but surely we scarcely required to be informed that "the abuse of alcohol deranges the moral condition of the mind and is the most frequent cause of crime," and subsequently to be reassured that "no one can

[1] "On Means for the Prolongation of Life." (Second and enlarged Edition of a Lecture delivered before the Royal College of Physicians, on December 3, 1903.) By Sir Hermann Weber. M.D., F.R.C.P. London: John Bale, Sons and Danielsson, Limited, 1906.

say the same of tea-drinking." "Some people" who suffer from loss of hair will find on page 87 a few remarks upon the subject, in the course of which they are advised "to keep the head cool and mostly uncovered, and sponge it regularly with cold water," together with "daily massage" of the head, by which "the nutrition of the entire skin is promoted, including the nerves, the capillaries, the rete mucosum, the hair follicles, the sudoriforous and sebiparous (*sic*) glands," and we may add, the heart, the kidneys, liver, spleen and spinal column, possibly the bowels. On page 16 we read "the healthy condition of the heart and blood-vessels which is necessary for maintaining the nutrition of the organs and tissues is effected by keeping them in constant action." To patients, no doubt, who have not heard of Harvey's discovery of the circulation of the blood, this precept would be most impressive. On the other hand, medical students are generally taught that the heart being an involuntary muscle, can attend to its own "constant action." The result, however, we further learn, of not attending to the constant action of the heart and blood-vessels is a tendency to decay at a more or less early period of life. We should have thought that any disturbance of the "constant action of heart" would have been attended with much more serious consequences. On page 26 we are informed that "people to whom the so-called walking without an object is tedious should endeavour to find an object." The object recommended by the author is a dog. This rather reminds us of the story of the fat old lady who sent two dollars to an astute Yankee who advertised—"How to get rid of superfluous fat." The reply was "Sell it to your soap man," and she was not satisfied. But we refrain from further criticism. Nevertheless we feel bound to quote the last paragraph on the last page, which contains much ripe wisdom, and precepts which every one desirous of living long should follow, namely "to cultivate sympathy, equanimity, contentedness, cheerfulness and hopefulness and the great power of the will towards pursuing the path of duty and controlling anger, vanity, envy, jealousy, and all other passions."

We observe that this book is a reprint of a lecture given before the Royal College of Physicians, London, on December 3, 1903.

PEARSON ON MODERN SURGICAL TECHNIQUE IN ITS RELATIONS TO OPERATIONS AND WOUND TREATMENT.[1]

THE ground covered by the term "Surgical Technique" is a large one, and may be held to include a description of any form of operative procedure. In this volume only matters relating to the efficient dealing with wounds, and the circumstances under which operations must be undertaken to ensure satisfactory healing of wounds, are discussed.

The preliminary considerations, which occupy about a fourth of the volume, deal with the subject of bacteriology and the properties

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[1] "Modern Surgical Technique in its Relations to Operations and Wound Treatment." By C. Yelverton Pearson, M.D., M.A., F.R.C.S. Pp. 392. Price 10s. 6d. net. London: John Bale, Sons and Danielsson, 1906.

of antiseptics, as well as with disinfection and infection; the two former subjects seem to us to be elaborated rather too fully and become somewhat wearisome reading, but the latter subjects are well gone into, and the principles on which the rational treatment of wounds is now carried out are clearly and fully explained, so that even the average trained nurse should have no difficulty in grasping these principles. We are glad to note that the author has a high appreciation of the activity of a spirituous solution of biniodide of mercury as an antiseptic for the hands; but we do not notice that he anywhere mentions the reason for the fact, which he states, that the solution should not be made with pure spirit, but with spirit containing about 30 per cent. of water, the reason being that experimentally it has been shown that the solution in pure spirit is not nearly so active a germicide as when about the amount of water mentioned above is present. The vexed question of gloves is left an open one, and we think this to be right, though on the whole the trend of opinion seems to be setting more and more in their favour, and the impairment of fine sensation mentioned does not, in our opinion, militate so much against them as is stated, as this difficulty seems to diminish with practice in their use; on the other hand, no reference is made of their slipperiness, especially in abdominal work, which is certainly a great disadvantage, but seems to be distinctly reduced by the roughened form of glove which can now be obtained.

That part of the book which is devoted to the cleaning of the hands we think to be particularly good, though our own condemnation of any form of nail-cleaner beyond soap and an ordinary nailbrush, would be stronger than that of the author; also, we do not agree with him that it is preferable to rub the spirit lotion over the hands rather than to immerse them in it, as it seems to us that in this way it is quite possible for part of the hand to escape satisfactory contact with the solution altogether. The rubbing of the hand with gauze swabs while *in* the solution, which combines both methods, seems to be the best plan. Turning to the garments to be worn at an operation, we are glad to note that those suggested are more in accord with common sense than has been sometimes displayed in this direction of late. The use of iodised catgut is strongly recommended, but we are at a loss to understand why its method of preparation has been separated by a page or two from the descriptions devoted to other methods of preparing catgut; also the storage of this ligature material in a dry state in sterile jars, which has much to commend it, is not mentioned.

The last part of the book is devoted to a description of the operating room or theatre and the actual operation, and here we are pleased to note that some dissent is expressed to the enormous expenditure that is now considered necessary by some in the erection and equipment of operating theatres. While no doubt there are many things which, where a large amount of operative work is done, may be considered to be essential and many others which are desirable, we cannot help feeling that there has been a tendency of late to unnecessary expenditure in this direction, while the advantages gained by this most elaborate theatre are often stultified, in a most ludicrous manner, by a want of attention to detail at the time of the performance of an operation. In view of the fact that the increasing expenditure of hospitals is becoming more and more difficult to meet, it is well to

keep in mind that increased economy in this respect does not necessarily mean decreased efficiency.

In conclusion, we can heartily commend the book before us as a lucid, satisfactory and up-to-date exposition of that part of "Surgical Technique" with which it deals.

PATERSON ON GASTRIC SURGERY.[1]

THIS book includes the Hunterian Lecture recently delivered by Mr. Paterson at the Royal College of Surgeons, and deals first with gastric enterostomy, then with gastric ulcer and its complication, and finally with treatment of cancer of the stomach. It is an excellent treatise on these three subjects, and bears evidence of a great amount of study of their literature, as well as most accurate investigation into the after history of operation cases. The book will be read with great interest by all abdominal surgeons, and the admirable statistics which it contains should make it a valuable book of reference.

With regard to the operation of gastro-enterostomy, the author maintains the superiority of the anterior operation, in spite of the opinion of most other surgeons in favour of the posterior method. Although he makes the anastomosis some inches below the commencement of the jejunum, he does not think that the loop so formed has any effect in producing the condition known as "vicious circle"; the cause of the condition, in his opinion, being due to omission to anchor the jejunum to the stomach. This is interesting, as Mr. Moynihan strongly maintains that "vicious circle" is due to the existence of the loop, and that anchoring stitches are quite unnecessary. The author has traced the subsequent history of 116 patients who had undergone gastro enterostomy; of these 8 died subsequently, 12 obtained some relief, and 94 were quite well and free from any gastric trouble. This is a most important investigation, as showing that the remote results after the operation are as excellent as the primary. The author considers that the goodness of the result will depend on the sufficient length of the anastomatic opening, which should be not less than two and a quarter inches in length.

An interesting description of peptic-jejunal ulcers is given, and it is estimated that the complication occurs in about 2 per cent. of the cases, being most frequent after the anterior operation.

Consideration is also given to the influence of gastro-enterostomy in the general evolution of the body, and after considering the various investigations into the subject, the author is of opinion that there is no interference with metabolism, and that perfect health may be enjoyed after the operation.

In considering operations on gastric ulcers, the statement is made that about 64 per cent. of cases treated in the medical ward of a hospital collapse after supposed cure, and he points out that 83 per cent. of those operated on are completely cured, and that with the risk of a mortality of not more than 3 per cent. In the treatment of perforated ulcer, it is recommended that gastro-enterostomy should be

[1] "Gastric Surgery." By H. J. Paterson, M.B., F.R.C.S. London: Baillière, Tindall and Cox, 1906.

performed in addition to suture of the ulcer; he supports this view on the experience of three successful cases, but as these were favourable cases they cannot prove the point, as it is not uncommon to have a run of three successful cases after simple suture. Unless absolutely necessary it seems undesirable to prolong the operation by performing gastro-enterostomy, especially as the walls of the viscera are not in an absolutely healthy condition. The author is not in favour of much sponging out or flushing of the abdomen. This, too, is strange, as one of his successful cases developed a subphrenic abscess, which he admits would probably have been prevented by sponging out and draining the subphrenic space. In the reviewer's opinion it is infinitely more important to thoroughly sponge out the peritoneum and insert drains in both loins and above the pubis, than to do a gastro-enterostomy. The statistics of operations in cancer of the stomach are of interest, the mortality after partial gastrectomy is given at 28 per cent., and of the remainder about one-half died within a year, but about 10 per cent. lived for over five years.

An appendix deals with the technique of the operation of gastro-enterostomy, and with the preparation and treatment of the cases. In conclusion, there are most elaborate tables of the late results of gastro-enterostomy, of pyloroplasty and of gastrectomy.

Altogether the author is to be congratulated on the work, and he may feel that he has rendered a great service to this branch of surgery by the accurate investigations into the after-history of so-called successful cases.

EMERY'S CLINICAL BACTERIOLOGY.[1]

CLINICAL bacteriology and hæmatology for practitioners, by W. D'Este Emery, will be found of the greatest service to all medical men, not only those who feel inclined to do laboratory work themselves, but to those too who wish to keep abreast of the times and learn how to interpret observations obtainable by investigation of the various tissues and fluids of the body. It is no easy matter for an author of a book of this kind to decide what to omit, and here Dr. Emery must be congratulated upon his judgment, for almost all essential and tested methods are included, whilst the conclusions based upon them are most guardedly and soberly expressed. The text is clear and concise, the plates exemplary, and the book in every detail quite overshadows the many translations from the German upon the same subject.

MAY AND WORTH ON DISEASES OF THE EYE.[2]

SEVERAL editions of "May's Manual of Diseases of the Eye" having been exhausted since the year 1900, the book now appears in an enlarged and revised form under the joint names of the author and

[1] "Clinical Bacteriology and Hæmatology for Practitioners." By W. D'Este Emery, M.D., B.Sc. Pp. 240. Price 7s. 6d. London: H. K. Lewis, 1906.

[2] "A Manual of Diseases of the Eye." By Charles H. May, M.D., New York, and Claud Worth, F.R.C.S.Eng. London: Baillière, Tindall and Cox, 1906.

Mr. Claud Worth. As a compilation for students and general practitioners the work can be highly recommended. It is concise and practical, and the almost lavish reproduction of coloured plates and illustrations with which its pages abound, will add greatly to its usefulness in this regard. We have no doubt that this new edition will meet with the same popular approval as characterised the previous editions.

BARDSWELL ON THE CONSUMPTIVE WORKING MAN.[1]

IN this book is to be found an analysis of the cases of twenty-five consumptive working men treated at the Sheffield Royal Infirmary in 1899-1900, and at Mundesley in 1903. An introductory chapter is contributed by Sir Wm. Broadbent in his usual lucid style, with the conclusion that the results—economic, philanthropic, preventive and educational—fully justify the erection of Sanatoria for consumptives.

Dr. Bardswell begins with a description of the conditions under which the patients were treated; very simple and inexpensive arrangements which need not cost more than 18s. per week per head if medical care is given gratis. Then follows a detailed description of the life histories of the patients, their financial position and conditions of work before and after treatment, a brief summary of the type of disease in each case, and the immediate and more remote effects of treatment on lung condition, general health and working capacity. These various facts are given in the form of tables illustrated by commentaries. The book ends with a statement of the conclusions to be drawn from the facts.

Dr. Bardswell points out that the wives and families must be maintained while the breadwinners are under treatment, and that the latter must secure a living wage after discharge if the improvement is to be maintained. In many cases suitable employment is insufficiently remunerative, especially in the case of married patients, so that it would imply an inadequate dietary. Adopting Rowntree's tables, and stating families in terms of men, Dr. Bardswell estimates that an expenditure of about 9d. per head per day, or 5s. per week is necessary for food alone, and gives a table showing what weekly income would be required according to the size of the family. He suggests that help be given according to a sliding scale for some time after discharge, and refers to the work done in connection with the Kelling Sanatorium in this respect. He discusses the value of an Agricultural Colony, and gives facts derived from the working of the Salvation Army Colony at Hadleigh. The food at this Colony appears to be quite suitable for the average working class consumptive after discharge; and with some exceptions the work done there is also suitable. He also urges the importance of instruction as to cheap and satisfactory dietaries, and gives several of these in an appendix.

The results of treatment, which are compared with those of the

[1] "The Consumptive Working Man. What can Sanatoria do for him?" By Noel Dean Bardswell, M.D., M.R.C.P. Pp. 202. Price 10s. 6d. London: The Scientific Press, Ltd., 1906.

Durham and Westmoreland Sanatoria, and of the German Working Men's Sanatoria, appear to show that in early nonfebrile cases complete arrest of the disease and thorough restoration to health and working capacity may be expected in 75 per cent. after three to six month's treatment, at a cost of 20s. to 30s. per head per week, and that this will be maintained in about 70 per cent., provided the after-conditions are not very unsatisfactory. Dr. Bardswell pleads for the admission to Sanatoria of even the less promising cases on philanthropic and educational grounds. From the nature of the subject there is, of necessity, nothing very new in Dr. Bardswell's book; but it is a careful and trustworthy analysis of the facts, worthy of the attention of all who are called upon to treat such cases.

BURNHAM ON THE COMBINED TREATMENT IN DISEASES OF THE EYE.[1]

THIS book consists of nine chapters putting forth the origin, methods, cases and results of a system of medication which the author has seen fit to call his "Combined Treatment."

The non-success or the great uncertainty of the treatment of eye diseases has been for many years a source of unrest and regret to Dr. Burnham. In 1890 a man came to him suffering from what is usually considered an incurable disease of the eyes; for some reason he decided to treat this case with pilocarpin in the form of hypodermic injection. For sixteen years Dr. Burnham's attention has been directed to this drug, which he thinks has generally been used by us in a hesitating, unbelieving way.

We gather it is a medicine which has great possibilities when used alone or combined with other drugs. The "Combined Treatment" is the use of pilocarpin combined with mercury and iodide of potassium, and there seems to be no doubt in the author's mind that the above is a most effective remedy in many diseases of the eye.

The author's working hypothesis is as follows: "The reason of the radical nature of its influence seems to be that it stimulates all the nerve centres to a remarkable degree, and through them the ordinary physiological processes, but especially those of the affected parts or organs, are aroused to an activity far in excess of the normal, and thus the diseased condition is acted upon and removed." "Moreover, this hyper-activity can be regulated and sustained for years, if necessary, by the manner in which the 'Combined Treatment' is administered."

This working hypothesis is somewhat involved, one might indeed almost say cryptic, in character, and therefore not of much value to the reader. The rest of the book is more or less in the same method and style. Of course it is impossible to criticise the "Combined Treatment" without trying it, and if it be all the writer claims it well deserves trial; but is it? We all know how often a vaunted remedy or treatment fails.

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[1] "The Combined Treatment in Diseases of the Eye." By G. Herbert Burnham, M.D.Tor., F.R.C.S.Edin., &c. Pp. 92. Price 3s. H. K. Lewis, 136, Gower Street, W.C., 1906.

It could be wished that the name "Combined Treatment" had not been given; "Burnham's Combined Treatment" may be thought by some to be a little charlatanical; it possibly sounds less ethically chaste than the author could have wished. From the point of view of Dr. Burnham, a great addition seems to have been made to our medical knowledge. For the rest of us time only will show the value of this "Combined Treatment."

BAIN AND EDGECOMBE ON THE HARROGATE WATERS, BATHS AND CLIMATE.[1]

WE have carefully perused this work and have nothing but praise to say of it.

The introductory section, as indeed are the subsequent ones, is of great and instructive value. It discusses the chemical, physical and therapeutical actions of waters in general, and subsequently of the special qualities of the Harrogate springs in particular. This section well repays a close study, as it is not given to every practitioner to have more than a rudimentary knowledge of the subject so carefully and concisely treated therein.

Section II. describes the various and numerous baths which can be obtained at Harrogate. The amount of information which it affords is a remarkable testimony to the careful observations of the authors, and in every way compares favourably with similar work which is sent forth from continental spas and health resorts.

Section III. deals with climatology in general, and of Harrogate in particular, together with a description of the town and its sanitary conditions. This section again is of great utility, since it affords instruction and no little comfort, not only to invalids who propose to take the "cure" at Harrogate, but also to that large class of people who go there in attendance on friends and relatives.

Section IV. is perhaps the most valuable contribution in the whole work. The busy practitioner can turn to it and gain information as to the treatment by balneological methods of many diseases which have proved intractable to drug medications.

We are glad to note that we have in this country a health resort which is so completely up-to-date, and to be assured by such scientific practitioners as the authors prove themselves to be, that it is not necessary for our patients to go to Nauheim, since they can find the same, or even improved, treatment at Harrogate, and that an excellent substitute for Kissingen is to be found in Yorkshire.

Finally, we are greatly pleased to notice that the authors do not claim for the Harrogate waters that they are able to cure each and every disease. They, with great wisdom and honesty, show what conditions of heart or other visceral affection should not be treated at Harrogate, as well as those for which cure or relief may be expected.

An excellent index completes a work which is admirably designed

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[1] "The Physiology and Therapeutics of the Harrogate Waters, Baths and Climate applied to the Treatment of Chronic Disease." By William Bain, M.D., M.R.C.P., and Wilfrid Edgecombe, M.D., F.R.C.S. Pp. 300. Price 7s. 6d. net. London: Longmans, Green and Co., 1906.

carefully written and well printed. We can cordially recommend its attentive study by any practitioner with large practice. The information which it contains could only be obtained by arduous and prolonged study, and the results of such study are now placed before the profession in condensed and assimilated form.

PROSSER WHITE ON CATARRHAL FEVERS.[1]

THE causes of catarrhal fevers, commonly called "colds," are at the present moment receiving considerable attention, and though it is not possible as yet to lay down any precise dogmata on the subject, considerable light has been already thrown upon the bacteriology of the complaint. Dr. White in this volume publishes the results of his careful work on the point, and though his results are not wholly in accord with those of other workers, there is no reason to suppose that both he and they are not perfectly correct in their several opinions; in other words, the probability that colds are due to a variety of organisms receives strong support from the work of these careful observers. Dr. White's own series of observations demonstrated that the organism known to bacteriologists as B. coryzæ segmentosus was at least the prevalent organism in the early stages of the affection which he studied, and so far he agrees with several other observers; others again have shown that the micrococcus catarrhalis and Friedlander's bacillus are not infrequently found at this stage; and there can be little doubt that several other organisms are capable of causing a catarrh of the nasal mucous membrane. The organism on which Dr. White has spent such excellent work is of special interest because of its likeness to the bacillus of diphtheria, from which it is to be distinguished only by the exercise of the greatest care, and by somewhat elaborate cultural experiments, a fact which renders the bacteriological diagnosis of diphtheria for clinical purposes more difficult than ever. We are, in fact, as Dr. Mervyn Gordon has pointed out, realising that in the case of the diphtheria bacillus we are dealing with a member of a somewhat large group of bacteria, closely resembling one another morphologically, and differing only in certain cultural characteristics and in their pathogenicity; a group strictly analogous to the typhoid-coli group, which includes four or five well-known, and probably many more imperfectly known, varieties. Whatever may be the ultimate fate of the bacillus coryzæ segmentosus, whether, as Dr. White tends to believe, it will be exalted to a place of high honour among the causes of "colds," or whether, as some other observers hold, it is comparatively insignificant, the value of Dr. White's careful work in differentiating from other diphtheroid organisms is still great. The bacteriological portion of the volume appears to be the most important, for though we do not wish to appear for one instant to underrate the clinical and therapeutic aspects of the question, yet it seems in our judgment that Dr. White has very little to say on these points which has not been urged before.

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[1] "Catarrhal Fevers, Commonly called Colds, their Causes, Consequences, Control and Cure." By R. Prosser White, M.D.Ed., F.R.C.S. Price 4s. net. London: H. K. Lewis, 1906.

The teaching as to the value of fresh air and efficient ventilation, the ridiculing of the fears of night air and draughts, and the beneficial effects of antiseptic swabs and gargles, have all a familiar air; and we welcome their reappearance because we believe that truths like these cannot be repeated too often to a public which is on such matters hardened in its own conceit. But for the profession the value of the book lies in the bacteriological section.

We have noted a few misprints in the volume, and there are some repetitions, and some involved sentences which Dr. White will no doubt correct and modify in his second edition; and if we may without offence suggest that the book would gain immensely by the exercise of a fairly vigorous compression, we should like to do so.

REGINALD HARRISON ON THE URETHROTOMIES AND KIDNEY CAPSULOTOMY.[1]

THIS book is for the most part a collection of the author's recent clinical lectures at the London Post-Graduate College and Polyclinic.

Mr. Harrison first deals with internal and external urethrotomy and a combination of the two operations as applied to the treatment of stricture. He prefers the method of Maissoneuve for internal urethrotomy, and lays stress not only upon the necessity of rendering the urine as antiseptic as possible by the previous ingestion of such drugs as urotropin, but also on the desirability of tying in a flexible catheter immediately after the operation, and leaving it *in situ* for some days. In this connection the author has some very pertinent remarks to make upon the cause of "urethral fever," and his conviction that it is entirely due to septic absorption. He also quotes the exceedingly low mortality of this operation where considerable experience is brought to bear upon it, and cites the records of 182 consecutive internal urethrotomies at St. Peter's Hospital in 1903 and 1904 with only one death.

Speaking of internal *versus* external urethrotomy for simple uncomplicated strictures, Mr. Harrison considers so-called impassable strictures, and emphasises their rarity; in his opinion they are becoming more uncommon because of the improvement in bougies and the better knowledge of how to deal with difficult strictures. It is but very rarely that the filiform guide of an urethrotome cannot be inserted through any urethra which will allow the passage of urine along it.

The author adequately discusses external and combined urethrotomy in cases of extravasation, fistulæ, false passages and ruptured urethra. In another section he deals with urethrotomy as applied to perineal prostatectomy, and for vesical and urethral stone.

The surgical treatment of nephritis has attracted considerable attention in the past few years, and in his article upon kidney capsulotomy Mr. Harrison claims, and we believe justly, the credit of being the first to suggest the practical application of surgery to what were considered purely "medical" diseases of the kidneys.

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[1] "The Urethrotomies and Kidney Capsulotomy in Diseases and Injuries of the Urinary Organs." By Reginald Harrison, F.R.C.S. Pp. 96. Illustrated. London: John Bale, Sons and Danielsson, 1906.

Mr. Harrison prefers simple linear incision of the capsule and possible shallow incision of the cortex to the operation of stripping the capsule or decapsulation as advocated by Edebohls. He supports his argument by the statement that the good effects observed in these cases are due to removal of tension and not to the new blood-supply which Edebohls suggests is afforded by the adhesions which form after decapsulation.

But though relief of tension may undoubtedly be the chief factor in acute cases, it is possible that an improved blood-supply may be of benefit in the more chronic cases, such as those reported by Edebohls.

The book is written in the clear and individual style which characterises all Mr. Harrison's writings; the practical hints will be found of much value to surgeons and practitioners, whilst the illustrations adequately elucidate the text. The type and printing are alike excellent.

CARSON ON AIDS TO SURGICAL DIAGNOSIS.[1]

THIS small book gives a concise account of the methods employed in the diagnosis of surgical cases. In parts it simply contains in very abbreviated form matter which is found in every text-book on surgery, but in other places methods are described which are often missing from larger books, such as the various tests for tubercle, methods of examining the blood, and the use of the sigmoidoscope. Although in some cases the brevity of the descriptions detracts from the value of the book, yet in others it is almost an advantage, for we can quite imagine a student muddled by the complicated descriptions of the varieties of spina bifida, being greatly helped by having the essential differences pointed out in a few words. Indeed, it will seem that the book will prove of the greatest value to the senior student, to whom the short tables summarising the differential diagnosis of such conditions as fractures of the base of the skull, compression and concussion, calculus and tubercle of the kidney, would be particularly helpful. On the other hand, many a practitioner might do worse than look up some of the sections, especially those referring to abdominal conditions, which are perhaps the best of the book.

CROWE ON HOME TREATMENT OF CONSUMPTION.[2]

THE aim of this little book is to supply the necessary rules of life required by a patient suffering from consumption, who, from one cause or another, has to be treated at home. We consider that this aim is well carried out in the book, and that it will meet a want which every practitioner must have felt: that of a small guide or handbook of rules which he can put in the hands of his patients for their own perusal. The book is carefully written, containing directions and instructions

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[1] "Aids to Surgical Diagnosis." By H. W. Carson, F.R.C.S. Baillière, Tindall and Cox, London, 1906. Price 3s. 6d.

[2] "Consumption. Treatment at Home and Rules for Living." By H. Warren Crowe, M.D. Pp. 32. Price 1s. net. Bristol: John Wright and Co., 1906.

on the necessity for free ventilation, disinfection, rest, feeding, and all the various details of the so-called open-air treatment, and any patient reading it cannot fail to gain a clearer insight into the rationale of his treatment, and thereby acquire fresh hope and courage, and so indirectly assist his medical attendant in the struggle with his disease. We recommend a perusal of this book to everyone who has the care of such patients in their own homes.

COLBECK AND CHAPLIN ON THE SCIENCE AND ART OF PRESCRIBING.[1]

IN these days of tabloids and proprietary preparations with ready-made formulæ, the writing of a prescription is rapidly becoming a lost art, more especially as, under the present system of medical education, the medical student has little or no opportunity of acquiring a practical knowledge of the uses and administration of drugs. For this reason we welcome this book, the value of which has been already demonstrated by the fact that a second edition has been speedily called for. It embraces just that which the young practitioner wishes to know, especially if he has to dispense his own drugs, in which he has had little or no previous experience. Among some of the most instructive chapters are one on incompatibility, another on the method of administration of drugs, and one which we have read with much profit to ourselves, namely, a table giving a list of drugs with the substances which will be found most useful when combined in correcting the taste. A short list of patent medicines, giving their approximate ingredients, is given as an appendix.

This is a book which we can thoroughly recommend to all in active practice, as no one can peruse it without gaining some knowledge which will at least render their prescriptions more palatable and pleasant to the patient.

WALTER M. BRICKNER ON THE SURGICAL ASSISTANT.[2]

THIS book is intended for students, house surgeons and general practitioners, but it will also be useful to operating surgeons themselves. It is well written and usefully illustrated. It contains the duties of the house-surgeon and in what manner he ought to assist, the preparations for an operation, the technique of asepsis and antisepsis, the mode of administration of various anæsthetics, the care and preparation of surgical instruments, as well as the post-operative care of the patient. Special chapters are devoted to different

[1] "The Science and Art of Prescribing." By E. H. Colbeck, B.A., M.D., F.R.C.P., and Arnold Chaplin, M.D., F.R.C.P. 2nd edition. Pp. 198. Price 3s. 6d. net. London: Henry Kimpton, 1906.

[2] "The Surgical Assistant." A Manual for Students, Practitioners, Hospital Internes and Nurses. By Walter M. Brickner, B.S., M.D. Pp. 363, with 123 original illustrations. International Journal of Surgery Co., 100, William Street, New York.

regions, such as the head, the throat, the abdomen. It is a very practical book, giving many useful hints, and is, upon the whole, up to date. We can honestly and warmly recommend it.

MONTGOMERIE PATON ON NEW SERUM THERAPY.[1]

THE contents of this book may be divided into two parts: clinical observations and theoretical considerations. The clinical portion contains the histories of nearly three hundred patients who had received either anti-diphtheritic serum or the plasma of normal animals given in one drachm doses several times a day by the mouth. From these observations the author concludes that this treatment has the power of raising the resistance of the body and of so enabling a patient to overcome any inflammation, no matter to what organism it is due, and in what part of the body it is situated. It is necessary to enumerate only a few of these conditions, such as appendicitis, erysipelas, meningitis, periostitis, nephritis, rheumatic fever, &c., in order to show the universal application which is claimed for the treatment. Further, it is stated that more chronic infections, such as tuberculosis, and various states of malnutrition, and such nervous diseases as epilepsy, neurasthenia and exophthalmic goitre, were improved or cured by this treatment. Metchnikoff has already put forward the view that injections of any serum raise the general immunity of the body, probably by stirring up phagocytosis. We have, therefore, to ask two things about the work before us: does it show that serum given in small doses by the mouth has the same effect as when it is injected, and does it prove that Metchnikoff's view is true in clinical medicine? These clinical histories do not indicate that any very striking or unusual results and recoveries were obtained, as other and more usual methods of treatment were used at the same time as the serum therapy. In fact, the only evidence brought forward that the serum had any causal connection with the observed results is the impression left upon the author, who attended the cases. Such evidence is no proof that treatment and result are cause and effect. It would be difficult to prove this clinically in one single disease. It would be necessary to observe simultaneously two parallel groups of cases, the one with and the other without this treatment, which were sufficiently numerous to eliminate coincidence, that is to say, many hundreds of cases. Scattered through the book are the accounts of a few experiments on animals, which, however, are too few and inconclusive to prove the truth of the main contention, although the experimental method would seem to offer a more easy and certain method of proof.

It is unnecessary to follow the author's theoretical considerations, which include an additional theory of immunity put forward in order to account for the clinical results. The book may contain a great truth and a therapeutical advance of the first magnitude, but there is nothing in it to prove that it does.

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[1] "New Serum Therapy." By D. Montgomerie Paton, L.R.C.S., L.R.C.P.Ed. London: Baillière, Tindall and Cox, 1906.

LIBRARY REPORT.

THERE is little to note respecting the Library, save that it "pursues the even tenor of its way" to the satisfaction of those interested in its progress. There have been some excellent books added lately from Review, notably Box and Eccles' "Applied Anatomy," and Roberts' "Medicine."

Subscriptions from members of the Society have been, I regret, less than formerly, but the generous gift of a guinea from Dr. Lawrance has helped to make up in some measure for the lessened revenue from this source.

The Library had the honour of notice by Royalty on the occasion of a recent visit to the West London Hospital by the Princess Louise, preparatory to which the books underwent the ordeal of a "spring cleaning," which was decidedly to their advantage.

HERBERT W. CHAMBERS,
June, 1906. *Hon. Librarian.*

SUPPLEMENTARY LIST OF SUBSCRIPTIONS.

Mr. J. J. Abraham.	Mr. F. Grinsell.	Mr. J. M. Moullin.
,, D. Arthur.	,, C. H. Leaf.	,, J. Pardoe.
,, E. Crook.	,, F. Lawrance.	,, H. Peake.
,, F. Dixon.	,, J.D.Mortimer.	,, W.H.Walter.

LIST OF BOOKS RECEIVED.

On Means for the Prolongation of Life. By Sir Hermann Weber, M.D., F.R.C.P.

The Physiology and Therapeutics of the Harrogate Waters, Baths and Climate. By William Bain, M.D., M.R.C.P., and Wilfrid Edgecombe, M.D., F.R.C.S.

Modern Surgical Technique in its Relation to Operations and Wound Treatment. By C. Yelverton Pearson, M.D., M.Ch., F.R.C.S.

Aids to Surgical Diagnosis. By H. W. Carson, F.R.C.S.

New Serum Therapy. By D. Montgomerie Paton, L.R.C.S., L.R.C.P.Ed.

The Consumptive Working Man. By Noel Dean Bardswell, M.D., M.R.C.P.

Gastric Surgery. By Herbert Paterson, M.A., M.B., B.C., F.R.C.S.

A Manual of Diseases of the Eye. By Chas. H. May, M.D. New York, and Claud Worth, F.R.C.S.E.

The Science and Art of Prescribing. By E. H. Colbeck, B.A., M.D., F.R.C.P., and Arnold Chaplin, B.A., M.D., F.R.C.P.

The Urethrotomies and Kidney Capsulotomy. By Reginald Harrison, F.R.C.S.

Catarrhal Fevers, commonly called Colds. By R. Prosser White, M.D.Ed., M.R.C.S.

Clinical Bacteriology and Hæmatology for Practitioners. By W. d'Este Emery, M.D., B.Sc.

The Combined Treatment in Diseases of the Eye. By G. Herbert Burnham, M.D.Tor., F.R.C.S.E.

THE POST-GRADUATE COLLEGE.

BY THE DEAN.

THE Summer Session opened on Monday, May 7. During the past three months 42 new Members have joined. Amongst them have been 10 officers of the Royal Naval Medical Service, 3 of the Royal Army Medical Corps, 3 of the Indian Medical Service, 6 from the colonies and abroad, and 20 from the United Kingdom. The number of Life Members is now 69.

Special Classes have again been well attended, and have been held in the following subjects: Ophthalmology, Practical Administration of Anæsthetics, Medicine, Surgery, Examination of Throat, Nose and Ear, Intestinal Anastomosis, Skiagraphy, Bacteriology, and Clinical Examination of Blood and Urine.

Owing to the demand for some teaching in Tropical Medicine, the School Committee have appointed as Lecturer on Tropical Diseases Dr. G. C. Low (late Superintendent at the London School of Tropical Medicine). Besides giving lectures in the ordinary course, Dr. Low is holding a series of special classes in this subject, which have proved very popular, especially with our Naval Members.

We regret to announce the resignation of Dr. Hamilton Wright of the office of Pathologist and Lecturer on Pathology. The department is now in the charge of Dr. Low, who is carrying on the classes for the present.

In consequence of the Dean ceasing to see Out-Patients, a new appointment in this department was necessary, and the Board of Management of the hospital have appointed Mr. J. Pardoe as Casualty Surgeon, to see the Out-Patients on Wednesdays and Saturdays. Mr. Pardoe will also give demonstrations on minor operations on one morning each week, and arrangements will shortly be made for him to hold a Special Class in Urethral and Bladder Surgery.

The Annual Dinner of the Post-Graduate College and of the Past and Present West London Hospital, will be held on Thursday, June 28, at 7.30 p.m., in the Empire Rooms of the Trocadero Restaurant, Piccadilly Circus, W., upon which occasion His Grace the Duke of Abercorn, K.G., has promised to be present. The chair will be taken by Mr. Stephen Paget.

We regret to announce the death of Dr. Alfred R. Hall, who attended the practice of the Hospital for some months last year.

The following is a list of Life Members and of post-graduates who have attended the practice of the West London Hospital for the past three months. An asterisk is placed against the names of those who are Life Members.

*L. H. Armstrong (Ripon).
*D. Arthur (Ealing).
Major R. F. E. Austin, R.A.M.C.
*G. J. Bagram (Bayswater).
*A. Baldock (Earl's Court).
*W. E. Barton (Streatham).
Chas. J. Battle (Natal).
*A. G. Beale (Kensal Rise).
Major F. W. Begbie, R.A.M.C.
C. W. J. Bell (Louth).
Fleet Surgeon G. A. S. Bell, R.N.
*Dep. Ins.-Gen. R. Bentham, R.N.
Staff-Surgeon G. T. Bishop, R.N.
Fleet Surgeon G. G. Borrett, R.N.
*R. D. Brinton (S. Kensington).
C. Leslie Browne (Swindon).
*W. M. Burgess (Harlesden).
*Capt. Carmody, R.A.M.C. (ret).
*E. R. W. Carroll, I.M.S., Lt.-Col.
H. W. Chambers (Hon. Member, Shepherd's Bush).
*Col. L. A. Clutterbuck (Bayswater).
E. A. Chill (Ealing).
S. C. Chuckerbutty (Bombay).
Staff-Surgeon R. F. Clark, R.N.
Major J. K. Close, I.M.S.
Fleet-Surgeon G. T. Collingwood, R.N.
James Cook (Canterbury, N.Z.).
Martin A. Cooke (Ealing).
*E. J. Coulson (Fulham).
H. Evelyn Crook (Twickenham).
H. Vicars Crossfield (Sydney).
*J. S. Curgenven (Bayswater).
G. G. Davidson (W. Kensington).
F. S. Dawe (Chiswick).
*L. Dobson (Kensington).
W. Barclay Dick (West Ealing).
W. McD. Ellis (London).
F. Carleton Evans (Kilburn).
*A. St. Aubyn Farrer (Paddington).
Staff-Surgeon F. Fedarb, R.N.
*W. H. Fitzmaurice (travelling).
A. Ross Fraser (Uitenhage).
*Fleet-Surgeon A. M. French, R.N. (ret.).
W. E. Fry (Hammersmith).
*M. N. Gandevia (Ceylon).
Surgeon A. T. Gailleton, R.N.
*F. Gans (West Kensington).
*H. M. Gay (Southampton).
*D. Gault (New Zealand).
*A. J. Grant (West Kensington).
J. K. Grimmer (Hounslow).
W. Habgood (London).
*C. H. Haines (Kensington).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
*A. Harrison (Yeovil).
H. F. Harvey (Perth, W. Australia).
*N. Heard (Swanage).
E. W. Hedley (Westminster).
Major S. H. Henderson, I.M.S.
Staff-Surgeon W. K. Hopkins, R.N.
*W. C. James (Kensington).
*Capt. R. C. Johnson, R.A.M.C. (ret.).
Rocyn Jones (Abertillery).
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (Chiswick).
*Alex. Krakowski (W. Kensington).
C. A. Lees (West Ealing).
*T. M. Legge (Temple).
A. S. Leslie (Aberdeen).
*T. Ligertwood (Chelsea).
*J. Lynes (Kensington).
*A. B. Lyon (Hammersmith).
*Norman McDonald (Harlesden).
C. McBryde (Port Glasgow).

*E. D. MacDougal (Walton-on-Thames).
Staff-Surgeon W. E. Marshall, R.N.
E. L. Martin (Chelmsford).
*J. B. Mackay (Newport, I.W.).
*H. McNickle (Vauxhall).
*G. Maguire (Kew).
*D. F. Maunsell (S. Kensington).
A. G. Meares (Melbourne).
H. T. N. Merrick (W. Kensington).
Frank Morgan (West Norwood).
Major G. T. Mould, I.M.S. (ret.).
*B. W. Mudd (Storington).
*W. Nolan (Bayswater).
*W. Norbury (Kensington).
C. D. Nuttall (St. Albans).
*R. W. Olver (New South Wales).
*H. M. Page (Kensington).
H. Compton Parsons (Torrington).
W. Harland Peale (Hampstead).
*A. F. Penny (Chelsea).
Douglas R. Pike (Kensington).
*R. D. Pollock (Acton).
Staff-Surgeon J. H. Pead, R.N.
J. A. W. Pereira (Exeter.).
J. Farquahar Philip (West Ealing).
Capt. J. W. F. Rait, I.M.S.
*A. Renny (Southampton).
*A. H. Rideal (Twickenham).
*Patrick Robertson (Canada).
*A. Tait Robinson (London).
*Neil Robson (Sittingbourne).
*F. E. Rock (Huddersfield).
H. B. Rogers (Victoria, B.C.).
*T. Mackay Ross (Fulham).
J. Searson (London).
*Lt.-Col. A. Silcock, I.M.S.
J. A. B. Sim (Banchory, N.B.).
*G. A. Garry Simpson (Hyde Park).
*A. Ross Sinclair (Parson's Green).
*W. Slater (Wanstead).
*H. H. Sturge (Maida Vale).
*E. Swain (Hampton Hill).
C. Thackray (St. Pancras).
J. H. Thompson (Croydon).
W. M. Thomson (Dunedin).
Surgeon J. Thornhill, R.N.
J. Lewes Timmins (Acton).
E. F. Travers (Kensington).
Vallency, A. de (Hammersmith).
*L. A. Walker (Lee-on-the Solent).
James Wallace (Acton).
*H. W. Walter (Brentford).
*J. Williamson (Putney).
C. E. A. Wilson (London).
N. Wishart (Aberdeen).
J. H. Wolfe (Hanwell).
*A. P. Woodeforde (Shepherd's Bush).

THE ANNUAL CONVERSAZIONE.

THE Annual Conversazione was held in the Town Hall, Kensington, after the delivery of the Cavendish Lecture by Sir William Macewen, and was well attended by a large number of members and guests invited by the President and Council. This was the first occasion on which the Kensington Town Hall has been engaged, and the increased size of the hall enabled the exhibitors to display their stalls in a more effective manner than before. Mr. Algernon Clarke's band gave musical selections throughout the evening, and refreshments were served by Messrs. A. Lines and Sons, of Hammersmith, in the annexe. In another annexe there was a display of motor cars adapted for the use of medical men. The exhibit was a most interesting one, and great credit is due to Mr. J. Pardoe, the Editorial Secretary, to whose organisation and untiring courtesy the success of the evening is due.

Messrs. Allen and Hanburys, Limited (48, Wigmore Street, W.).

At this attractive stand there was all the evening a large number of visitors who were shown the latest novelties of this firm. Among these were: Gossett's Retractor. New self-retaining Abdominal Retractor, which fixes itself automatically. Bellamy Gardner's Tongue Clip. This has been designed to make a pin hole in the tongue, thus preventing the bruising which so often takes place when the ordinary pattern tongue forceps are used. Schoemaker's Rib Shears. These have been designed to remove the periosteum and cut through the rib simultaneously. Eve's Cerebrospinal Manometer, for measuring the cerebrospinal fluid. Motoring Emergency and Ambulance Case combined, as supplied to the Great Northern Railway Company, &c. This case has been in use for over three years and has been found to be the most useful, and at the same time, the most compact case obtainable. The "Allenbury's" Midwives' Case. This case has been put forward to comply with the regulations of the Central Midwives' Board. It consists of a steriliser and appliances required for accouchement cases. All necessary articles can easily be sterilised and rendered aseptic. Size 14½ in. long, 6½ in. broad, 4½ in. deep. Chloroform Mask, de Prenderville's, Allen and Hanbury's patent. This mask possesses several advantages over all other forms. The part of the apparatus resting on the patient's face is made in the form of a gutter, thus preventing any moisture from running on to the face and causing blistering. Another advantage is that the frame is arranged to keep the lint well away from the face, and the whole frame of the mask is built taller. The apparatus is collapsible and can be carried in the coat pocket. New Forceps for Prostatectomy. These are designed for pulling down the prostatic gland through the supra-pubic opening. They are useful for thyroid glands, tongue forceps, &c., &c. New Dissector for Enucleating the Prostatic Glands. Aseptic Syringe. This new syringe is fitted with three pipes, and can be taken entirely to pieces and thus rendered practically aseptic, and it can therefore be used for nearly every purpose for which a syringe is required.

Messrs. Arnold and Sons (26-31, West Smithfield).

Among the many exhibits of this well-known firm may be mentioned an Improved High Pressure Steam Steriliser for Dressings, &c., patented, suggested by W. Bruce Clarke, F.R.C.S. A working model of one of the above sterilisers was exhibited showing the original in every detail. The Sterilising Kettles of different sizes and shapes, for use with the steriliser, were also exhibited. These kettles are the most perfect for sterilising dressings, as when the dressings are placed in the older forms of kettle, the bands with air holes round them are usually turned so as to admit steam into the dressings. After sterilising, the lid of the steriliser is opened, and before these bands can be turned to close the openings round the kettles, germs and dust easily get in, whereas with this improved form the dressings are placed in the kettle, which has a fixed perforated bottom and a hinged perforated top. A piece of cotton wool is placed on the top and bottom, and a hinged perforated cover is placed on both, it is then put into the steriliser, and after sterilisation is taken out and is ready for use without having to open or close any part. A general assortment of the most modern instruments for surgery, gynæcology, &c., among which may be noted improved forms of Koelmann's Anterior and Posterior Urethral Dilators, Operation Gloves made of Battiste cloth, Falla's Improved Guarded Trephines, Burton Browne's Improved Aural Syringe, Sampson's Self-retaining Abdominal Retractor, Heath's Glass Well for disinfecting probes, cotton wool holders, &c., before use. Heath's Mastoid Instruments, Moure's Nasal Spokeshave, Moure's Post-Nasal Curettes, improved patterns of Adenoid Forceps, Peritoneal Catch and Holder, by Macnaughton-Jones, Frommer's Uterine Dilator with eight blades, Boyer's Pelvimeter for external and internal measurements, Improved

Perineal Needles, with two, three, or four blades on one handle, Lumsden's Nasal Dilator, Burton Browne's Nasal Dilator, Corner's Appendectomy Clamp, Post Nasal and Laryngeal Sprays made entirely of glass, Hall's Dalby's Improved Pleximeter, Doyen's Hysterectomy Clamps for broad ligament, Hurry Fenwick's Improved Bladder Forceps, Drury Thomson's Nasal Anæsthetic Inhaler for Ether and Ethyl Chloride, Luy's Urine Segregator on Stand, and various improved forms of ethyl chloride inhalers.

The Aylesbury Dairy Company, Ltd. (31, St. Petersburgh Place, W.).

This celebrated firm had an attractive stand on which were shown samples of their various food and milk products. The Aylesbury Dairy Company, Ltd., were the originators of humanised milk, and their experience, aided by constant research and scrupulous care, has enabled them to keep easily in the forefront with this preparation. Among the products shown were "Humanoid," a concentrated preparation of humanised milk to be diluted with twice its volume of boiled water; "Pollyta," a new dry food for infants, to follow humanised milk; Peptonised milk for invalids, sterilised milk and cream; this preparation was supplied to H.M.S. "Renown" during the voyage of the Prince of Wales to Bombay. Specially Prepared Whey, Milk Sugar, Koumiss, Kefir, a more palatable and non-effervescing form of Koumiss, and solid milk, the latter being a powder obtained by evaporating milk containing its full percentage of cream to dryness.

George Back and Co. (13, Devonshire Square, Bishopsgate Street, E.C.).

Samples of the "G. B." Diabetes Whisky were exhibited and *guaranteed* to be specially distilled from pure malt only in a pot still, absolutely free from sugar or any colouring or flavouring matter, over ten years old. See *Lancet*, October 5, 1889, and *British Medical Journal*, March 28, 1891, analyses. This Whisky has been before the profession for twenty years, and is well recommended in cases where a pure and wholesome stimulant is necessary.

Messrs. John Bale, Sons and Danielsson, Limited, (83-91, Great Titchfield Street, W.).

The exhibit of this firm was, as in previous years, again to the forefront, especially with respect to publications on Tropical Medicine. The Journal has now been made the official organ of the Colonial Offices, and the reports of their officers appear in each issue. Braun's "Animal Parasites of Man," translated by Miss P. Falcke and brought up to date by Dr. Sambon and Mr. F. Theobald, and published this year, has already demonstrated the need for such a work by its ready sale both here and in the United States of America. Amongst the books which have run into new editions may be mentioned: "Adenoid Growths of the Naso-Pharnyx," by Garry Simpson; "Squint," by C. Worth; "On the Means for the Prolongation of Life," by Sir Herman Weber: "Patent Foods and Patent Medicines," by Robert Hutcheson, and "Verb. Sap. on Going to West Africa." New publications: "The Urethrotomies and Kidney Capsulotomy in Diseases and Injuries of the Urinary Organs," by Reginald Harrison; "The Operative Treatment of Prolapse and Retroversion of the Uterus," by J. Inglis Parsons; "Modern Surgical Technique in its relation to Operations and Wound Treatment," by C. Yelverton Pearson, and "The Cerebellum, its Relation to Spatial Orientation and to Locomotion," by Sir Victor Horsley. The simple Medical Card Index System attracted considerable attention, the principal points claimed for it being: (1) The best, simplest and most comprehensive Medical Card System in existence; (2) does away with book-keeping altogether; only *one* book necessary, the Simple Medical Year Book. The System will be

found to suit the requirements of most, if not all, practitioners; as the method and rulings adopted, whilst extremely simple, afford ample scope for individual preference as to details. The Card Ledger System has many advantages over the book form. With ordinary ledgers, one has first to refer to the index, and then, especially in a large practice, valuable time is wasted in finding the patient's name, before turning to the page sought; with the Card System, the index letter and the patient's card are found at one and the same time. Again, it often happens that a patient to whom a page has been allotted proves in course of time to be only a temporary one, and thus the page is wasted. With the Card System, the card is simply removed from the cabinet and kept elsewhere, thus space is economised; and if, after a long interval, the patient should return, the card can be found, and the previous treatment, &c., noted. Many practitioners have two, if not more, ledgers in daily use; owing to the fact that a considerable portion of each consists of what is usually termed "dead matter," *i.e.*, closed or transferred accounts. But in sending out the accounts, each page of the various ledgers has to be referred to in case any one account may be overlooked. With the Card System a considerable saving of time, to say nothing about convenience, is gained, as only "live matter" has to be dealt with. The Card Ledger is also less costly, and is ever up to date. The Cabinet, Index Cards, &c., practically never become obsolete, the only expense incurred after the initial outlay being the addition of fresh record cards from time to time as required.

The Blickensderfer Typewriter Company (9, Cheapside, London, E.C.)

On this stand were exhibited examples of the Blickensderfer Typewriters. One No. 7. foolscap model, complete in polished oak veneer carrying case, 11¼ lbs. weight complete; one No. 5 ditto (very portable) 10¼ lbs. complete; one brief size for legal work; one No. 5 model in special "Elite" leather travelling case, which carries machine, also a supply of stationery, &c; one No. 7 model in special literary leather travelling case, which also carries machine and stationery, &c. Also full range of specimens of the various interchangeable typewheels, which can be used for all of the above machines. A few of the special points of the Blick are:—Visible writing, permanent alignment, unlimited line widths, interchangeable type, no ribbons, portability; also *reasonable price.*

Brand and Company, Limited (74-84, South Lambeth Road).

At the exhibit of Messrs. Brand and Co., Ltd., attention was directed to their well-known Essence of Beef, Chicken, Mutton and Veal, which are known all over the world as being of inestimable value in cases of exhaustion. These essences consist solely of the finest meats, extracted by a gentle heat, without the addition of water or any other substance whatever. They contain, therefore, the most stimulating and exhilarating properties of the meats, calculated to invigorate the heart and brain immediately, without any fatty or other elements which require solution in the stomach. These are now put up in glasses, and in that form their clearness and the absence of any solid particles can be readily seen. Brand's Meat Juice also is recommended strongly by the profession as a most valuable preparation. It consists of the juice of the finest meats, extracted in the cold, and rich in natural uncoagulated proteids. It has latterly been largely used as the chief constituent of Nutrient Enemata, and as such has given most gratifying results. Brand's Meat Lozenges may also be favourably mentioned for their sustaining properties, this having been abundantly proved during the course of the Boer War. Tourists, motorists, fishermen, sportsmen, and travellers of all kinds will find in these a valuable possession, being put up in a convenient and easily portable form, and forming, in reality, "a meal in your waistcoat pocket." One of the newest of Brand's specialties is their Beef Tabule, which provides

a nutritious and savoury cup of Beef Tea by the simple addition of boiling water. Medical men and nurses will find these most valuable to have handy, to be used in cases where Beef Tea may be required to be administered immediately. All of Messrs. Brand's preparations are made from the finest *British* meat, which is bought each morning in Smithfield Market, and prepared and put up at their extensive and convenient premises, Mayfair Works, Vauxhall, under the most careful supervision to ensure cleanliness and the exclusion of any deleterious particles, and can be confidently prescribed in the most difficult cases and to the most delicate constitution.

Burroughs Wellcome and Co. (Snow Hill Buildings, London, E.C.)

The exhibit of this firm comprised some fine examples of modern pharmaceutical skill. Specimens of recently introduced preparations were shown, including a useful range of "Tabloid" Brand pastilles. These are prepared with an agreeable demulcent basis which does not dissolve too quickly, and therefore a prolonged local application of the medicament is ensured. "Tabloid" medicinal products were also exhibited in large variety. "Tabloid" medicine cases for the physician's pocket, handbag or carriage, were shown in various designs. The extremely convenient Pocket Hypodermic Cases, fitted with "Tabloid" products and the All-Glass Aseptic Hypodermic Syringe, are excellent examples of the convenience and portability of "Tabloid" outfits. Several additions to the series of Pleated Compressed Bandages and Dressings have been made, among which may be mentioned compressed iodoform dressings and compressed wool between gauze. The "Soloid" Bacteriological Case will prove valuable to the general practitioner who hitherto has been accustomed to refer to the laboratory investigations which he may now himself undertake in the surgery with the aid of this equipment. Its small size and light weight admit of its being easily carried, and the physician can utilise it at the patient's bedside, to obtain a blood sample or a throat swab. The case contains the alcohols, distilled water, Canada balsam, pipettes, tweezers, forceps, microscopic slides and cover-glasses, spirit lamp, needles, funnel, watch-glasses, "Soloid" Microscopic Stains, &c., necessary to carry out the tests. A considerable range of products is now issued under the "Wellcome" Brand: Serums, Chemicals, Chloroform, &c., specimens of each being exhibited. "Hemisine," is now well-known as a staple and reliable preparation of the active principle of the medulla of the supra-renal gland issued by Burroughs, Wellcome and Co.; "Tabloid," "Soloid," and "Enule" preparations of various strengths and combinations were shown. "Salodent," the aromatic liquid dentifrice, appeared in its new packing. This excellent preparation possesses marked antiseptic qualities and is in every way an agreeable and effective agent for cleansing the teeth and mouth.

Messrs. Callard and Co. (65, Regent Street, London).

The display of this firm comprised New Starchless and Sugarless Preparations to supersede the old repulsive gluten foods. Among the preparations shown were Starchless Breads, Cakes, Biscuits; Sugarless Marmalade, Chocolate, Fruits, Jellies, Jujubes, and Beverages, offering to the diabetic sufferer a considerable variety in his diet.

Messrs. Cooper and Co., Pharmaceutical Chemists and Mineral Water Manufacturers (80, Gloucester Road, South Kensington, and 24, Sloane Street, Belgravia, S.W.).

Pure "Oxycarbonated" Mineral Waters: "Oxycarbonated" waters are a great improvement on the ordinary carbonated mineral waters, the more or less lowering effects of carbonic acid being counterbalanced by the stimu-

lating properties of oxygen. These waters are aerated with carefully purified carbonic acid and oxygen gases by patent process, and are prepared with organically pure distilled water. "Globenaris" Table Water, a pure, sparkling, and refreshing water. "Globenaris" Water is distilled water aerated with oxygen and carbonic acid gases by Cooper and Co.'s patent process. It is especially adapted for general use, being pleasant, refreshing, and not "lowering." "Globenaris" Water is beneficial as a mild liver stimulant, and as a corrective where there is a rheumatic or gouty diathesis. Supplied in porcelain-lined syphons, and bottles (quarts and pints). Messrs. Cooper and Co. prepare the following with pure distilled water and aerated with oxygen and carbonic acid gases by their patent process: Lithia, Lysidin, Lycetol, Phenocoll, Piperazin, Urotropin, Tonic, "Globenaris" Water, Vichy Water, Oxygen Water, &c. The above are supplied in porcelain-lined syphons, thereby avoiding all possibility of metallic contamination. "Oxygen" Water: Distilled Water aerated with pure oxygen gas; supplied in bottles and splits. Emulsio Ol. Morrhuæ c. Lactophosph. (Bridges): Contains pure cod-liver oil with lactophosphates. The agreeable taste, combined with the digestive ingredients, enables children and delicate patients to easily assimilate this Emulsion. "Globena" Meat Juice: Prepared from the finest English beef, the albuminous principles being entirely retained. It is delicate in taste, and can be retained and assimilated in the most extreme cases when other foods are rejected. "Globena" Beef Essence. "Globena" Chicken Essence. "Globena" Mutton Essence. "Globena" Turtle Essence. "Globena" Veal Essence. These essences consist solely of the juice of the finest meats, supplied in glass jars. "Globena" Pure Beef Tea (Concentrated). "Globena" Meat Lozenges: A concentrated meat lozenge of delicate flavour, furnishing in the smallest possible bulk the maximum of nourishing and easily digestible food. "Globena" Beef and Malt Wine: A nutritious and strengthening tonic wine. "Globena" Grape Jelly: an agreeable and nutritious jelly prepared from grapes; supplied in glass jars. "Cachoids": Very flexible, tasteless, and readily soluble wafer capsules. They form an efficient means of administering nauseous and insoluble powders, and those the action of which is impaired by solvents. They are at a great advantage over pills and tablets, as excipients and compression are avoided. "Cachoids" of Quinine, Antipyrin, Salipyrin, Sulphonal, Phenacetin, Bismuth, &c. "Globules" (soft gelatin capsules): "Globules" contain accurate dosage of medicament, are readily soluble, and from their shape and flexibility are easily swallowed. Cascara Sagrada, Creosote, Guaiacol, Cod-Liver Oil, Castor Oil, Ichthyol, Pepsin, &c. Liquor Quininæ Salicylatis: This preparation contains in each fluid drachm one grain of the natural Salicylate of Quinine. It has given excellent results in the treatment of gout, rheumatism, migraine, malarial fever, and allied complaints. The solution of this Salt of Quinine is more rapidly and effectually absorbed than when administered in powders, pills, or suspended in a mixture. "Oxycarbonated" Fluid Magnesia: This form of administration of a popular medicament combines all the advantages of the older preparations of fluid magnesia with those accruing from the process of oxycarbonation, which are referred to under our "Oxycarbonated" Waters. Ext. Sennæ Leguminæ Liq.: A mild aperient. Pastil Menthol Co.: These pastils contain Cocaine, Menthol, and Red Gum. Useful in cases of inflammation of the mucous membrane. Pastil Heroini: $\frac{1}{24}$ grain, &c., various pastils. Sinapine Tissue, or Mustard Leaflets: This is a convenient form of mustard plaster, as it is easily applied, quick in action, and does not blister the skin. Syr. Glycerophosph. Co.: The Glycerophosphates have a marked stimulating power on the nervous system, and a distinct accelerating influence on the digestive powers, improving the general nutrition. Elixir Terpini et Heroin. Co.: Heroin exerts a powerful action on the respiratory organs, acting as a specific in all forms of cough. Sterilised Dressings (Cooper and Co.): Sterilised Gauzes, Lints, and Wools. Each packet is wrapped in

parchment-paper and placed in an air-tight, dust-proof carton. Oxygen Gas (Pure) for Inhalation: In cylinders of 10 feet, 20 feet, and upwards. Fitted with special reducing valve.

Messrs. F. Davidson and Co., Manufacturing Opticians and Electrical Instrument Makers (140, Great Portland Street).

This firm showed, with their usual enterprise, many novelties they have recently introduced to the profession. A set of electrical appliances comprising: (1) Direct Ophthalmic Illuminator; (2) Laryngoscope, with two mirrors and lens for transillumination of the jaw and antrum, spatula or tongue depressor; (3) the "Nasaural," a new appliance for illumination of the nose and ear (with nasal and aural specula), with an excellent dry battery, was especially noticeable. The Direct Illuminator is a unique instrument, and facilitates examination of retinal conditions amazingly. For the general practitioner it is handy indeed, as no special course of study is necessary to become proficient in its use. Five minutes' practice with it and one can use it easily. Mr. Percy Dunn, F.R.C.S., ophthalmic surgeon to this hospital, has suggested a valuable addition to the instrument which Messrs. Davidson have adopted. A lens clip is arranged, so that a series of convex lenses can be used with it. These lenses enable one to easily detect fine opacities in the vitreous and to estimate the degree of swelling in optic neuritis. A special feature of this firm's appliances is their uniform good work and moderate price. The set described above is supplied in a leather-covered box for £5. We also noticed an electrically illuminated tangent scale for facilitating the use of the "Maddox" Rods, and a series of adaptors (patent) enabling one to use small electric instruments on the house current, either direct or alternating. This firm also introduce a novel feature in trial cases. This consists of the insertion of an opal tablet in the case on which notes of the case under consideration can be made. The advantage is obvious. A visit to the firm's premises would be interesting to any medical man, as they always have something new to show.

Messrs. Down Bros., Ltd., Surgical Instrument Makers (21, St. Thomas Street, Borough, S.E.).

Down Bros., Ltd., showed a number of new Instruments and Appliances, including their Patent Noiseless Surgical Hand Motor, fitted with burrs of various forms, ovoid and spherical, for mastoid operations, as used by Sir William Macewen; drills for bone boring; circular saws, for straight or bayonet cuts; McArdle's concavo-convex saws for cutting in circles (several segments of circles may be so joined as to form almost any desired shape); also specially designed saws and other instruments made for Dr. Nicol, of Glasgow. Various instruments for the surgical treatment of fractures, Mr. Arbuthnot Lane's instruments for screwing, Dr. Dujarier's Bone Staples, and Mr. Burghard's and Mr. Robert Jones' Punches for inserting them, Mr. Watson Cheyne's Metal Plates, Mr. Cuthbert Wallace's Bolts and Nuts, and Mr. Anderson's Medullary Spikes and Screw Clamps in various forms. Mr. G. H. Colt's ingenious set of instruments for wiring aneurysms; a fine trocar and cannula is first thrust into the aneurysm, the trocar withdrawn, and a cartridge containing a bundle of wires joined together at one end is then attached to the cannula, the bundle of wires is then forced into the sac by means of a blunt pilot, and expands in the form of a cage or wisp. A simple set of instruments for the same purpose, designed by Dr. Cornelius Griffiths, of Cardiff. Among many interesting instruments for stomach and intestinal operations were Mr. Mayo Robson's Decalcified Bone Bobbins and Stomach Clamp Forceps, Mr. Moynihan's Stomach Clamp Forceps, Gastro-enterostomy Needles and Glass Drainage Tubes, Mr. Carwardine's Intestinal Twin Clamp

Forceps and Enterostomy Tubes, and for general abdominal surgery various models of peritoneum and tissue forceps, by Mr Moynihan, Mr. Lenthal Cheatle, Mr. Arbuthnot Lane, Dr. McArdle of Dublin Dr. Poole Lansdown, of Clifton, and Dr. Russell Coombe of Exeter. A new form of Bullet Forceps and Probe for use in connection with the telephone should prove of great service in the detection and removal of bullets, particularly of those embedded in the brain substance; it is so constructed that if the probe connected with the telephone be first introduced and the bullet detected, the forceps, which are provided with a groove, are slid along the probe, so that the bullet once detected, touch is maintained until seized by the forceps. A variety of Cystoscopes were shown, the direct vision Cystoscope of Luys, Newman's Demonstration Cystoscope, &c., and also a new form of Urethroscope, by Mr. Wyndham Powell, with very high illuminating power. A Syringe for Local Analgesia, by Dr. Sheen, of Cardiff, is a simple form of sterilisable Syringe with various needles, some bent at an angle for use about the neck. A Syringe for injection of Stovaine, consisting of a sterilisable Glass Syringe; a separate handle is furnished for the introduction of the needle.

Messrs. Duncan, Flockhart and Co. (153, Farringdon Road, London; 104-108, South Canongate, Edinburgh).

The more important preparations shown by Messrs. Duncan, Flockhart and Co. were the Anæsthetics: Chloroform, Duncan's Pure, S. G., 1·490. This Chloroform, known as Duncan's Pure, is prepared entirely from duty-paid British Ethylic Alcohol. Chloroform made from Methylated Spirit and Chloroform made from Acetone, both pure and answering all the B. P. tests, were also exhibited. Chloryl Anæsthetic (Duncan). Chloryl Anæsthetic is *absolute Ethyl Chloride*, having a specific gravity of about ·920 at 0 deg. cent. It is perfectly free from Hydrochloric Acid, empyrheumatic bodies, and ethers. As an anæsthetic it is largely used for minor surgical operations, requiring only a short narcosis. Apart, however, from its employment by itself, it is being increasingly used as a preliminary to the administration of Chloroform or Ether. Chloryl Anæsthetic is supplied in 60 cc. graduated Glass Cylinders, fitted for automatic delivery, also in 3 and 5 cc. Glass Capsules. Ethereal Sulphur Cream: this is an elegant preparation, containing 10 per cent. of sulphur and 1 in 3,000 Mercuric Iodide, combined with Wool Fat, Ether, and rendered soluble. It is put forward by Messrs. Duncan, Flockhart and Co. as a cure for scabies, pediculi, &c. Being completely soluble in water, it is easily washed off, leaving the skin soft and pliant. Dencoll (Duncan). This is a very refreshing tooth and mouth wash, and of great antiseptic power, because, when it comes in contact with the saliva, it splits up into phenol and salicylic acid. It is absorbed into the gums, so that the antiseptic action goes on for some considerable time. Used as a Gargle, it will be found useful in laryngitis and all forms of sore throat, as it relieves the pain and difficulty of swallowing. For use it must be diluted, thirty drops to half a tumblerful of water, when the diluted solution forms a powerful antiseptic and slightly astringent wash. It is made in two flavours, Peppermint and Rose. Compound Suprarenalin Snuff. Suprarenalin is the active principle of the Suprarenal gland, and is a very powerful astringent, hæmostatic and heart stimulant. For temporary relief in hay fever and cold in the head the Suprarenal treatment has no equal. Messrs. Duncan, Flockhart and Co. also exhibited a great variety of Compressed Tablets; the principal ones being Phenol-Phthalein Tablets. These Tablets require to be masticated before being swallowed, and in view of this they have been pleasantly flavoured. The physiological action of Phenol-Phthalein is at present somewhat obscure, but it is reputed to act entirely as a simple, non-irritating laxative, with little or no action upon the kidneys. These Tablets are manufactured in two strengths, Mild and Strong, the former are suitable for young children and invalids; the Strong are

intended for adults, and, if necessary, two can be administered for a dose. Aromatic Throat Tablets (Duncan). These Tablets contain Benzoic Acid, Eucalyptol, Menthol, Aniseed and Cocain, with a basis of sugar. They are of great efficacy in cases of ulcerated, relaxed throat, &c. There were also a large variety of soft Gelatine Capsules. A few other important preparations shown were: Duncan's Antiseptic Ætherial Soap, a valuable antiseptic disinfecting wash, very useful in preparing skin areas prior to surgical operations. Bismulait (Mist. Bismuthi Alb.), a uniform, palatable and amorphous preparation of Bismuth. Each fluid drachm contains the equivalent of 5 grains of Oxycarbonate of Bismuth. Elixir Fructi Laxative. An elegant and mild aperient, composed of Senna, Cascara, Tamarinds and Cassia, with the agreeable flavouring of other fruits. Antiseptic Dusting Powder (Duncan) composed of Zinc Oleate and Boric Acid in combination with Pure Wheaten Starch, delicately perfumed and in a fine dry powder. Ungt. Resinæ Co. This is an Emollient Antiseptic Ointment, containing, besides the resin, calamine and Bismuth, pine oil, &c., and rendered antiseptic. This Ointment has been found extremely useful in cases of eczema, ulcers and eruptions of all kinds. Antiseptic Dermolia. This is an elegant and delicately perfumed Antiseptic Cream. It contains 1 per cent. of Carbolic Acid with Zinc Oxide, Thymol, Wool Fat, &c. It will be found useful for all toilet purposes. It is also of the greatest value in eruptions of the skin, as it not only keeps the parts antiseptic, but by reducing the itchiness, scratching is avoided and complication prevented. Besides being useful in eczema and acne, it will be found a handy remedy for burns, chilblains, &c., as it is very soothing and gives immediate relief.

Messrs. S. W. Easton and Son (62, Great Portland Street, W.).

This firm had a very interesting exhibit of Medical Stationery specially adapted to the requirements of the Profession: Account Forms, Appointment Cards, Note Papers and Prescription Sheets, &c., &c. We noticed in particular this firm's new Portland Vertical Filing Cabinet, a well made article at a popular price of 17s. 6d., the cheapest on the market. The file is strongly recommended for case sheets and will hold 2,000, and is fitted with guide cards and folders complete. For those requiring a still better and more elaborate article, we could suggest nothing better than the "Record" System of Filing Case Sheets, also shown by Messrs. S. W. Easton and Son. The Gunn Sectional Bookcase strongly appealed to us, as the very perfection of utility and neatness, as well as the low rate at which these book cases are now sold. Another most interesting feature of this exhibit was the Onoto Self-Filling Fountain Pen; all the many defects in the ordinary fountain pen have been most successfully defeated in this wonderfully simple pen. It is self-filling, it can be carried in any position in the pocket without the slightest leakage, it will not "misfire," and—another great feature—the pen will not flood when the ink is nearly exhausted.

Messrs. Edgar (The Blenheim Gas Engineering Works, Hammersmith, W.).

Due in some respects to the recent criticisms on gas as a heating agent by Dr. Alex. Bowie and again by Dr. Bonney at Chelsea Town Hall, the exhibit of Mr. William Edgar, patentee of the Blenheim Gas Fire, formed an appropriate item. The special features demonstrated were: The adaptability to any existing coal grate, the arrangement of a series of Bunsen tubes constructed on novel lines with silent and "non-lighting" back burners. In the construction the Inventor has forestalled a common fault, viz., blocking up of the burner with broken pieces of asbestos; this can never occur in the Blenheim. The body of the burner is elongated and circular, successfully preventing any accumulation of dust. A further improvement is that the

gas-way is composed of a series of fine holes instead of one large one. As regards the easy regulation in the point of temperature of a sick room or even a living room, this is arranged for by a duplex tap which provides (when the room gets to the required heat) for the turning off of half the gas, leaving a cheerful incandescent glow at the temperature desired. The heat is so arranged as to be thrown out on the floor level. A feature that cannot be over-estimated is that the fire is *silent*. Gas burned in this fire is not more drying than a similar amount of heat derived from coal; and moreover, Mr. H. A. Des Voeux, at a discussion at the Society of Architects on April 17th, 1904, asserted that with a coal fire you simply made unpurified gas, but with a gas fire you used purified gas. It is due to the splendid support given by the Medical Profession (in whose consulting rooms, surgeries, &c., over 600 in London alone are fitted) that the inventor determined to place it prominently before the visitors to the Kensington Town Hall. The patentee would like the opportunity of posting a very interesting booklet on the subject if he is notified at The Blenheim Gas Engineering Works, Hammersmith, W.

Messrs. Fairchild Bros. and Foster (57, 60, Holborn Viaduct).

In addition to their well-known preparations "Panopepton" (a palatable complete concentrated nutriment), "Pepsencia" (a liquid pepsine), Peptogenic Milk Powder, for the easy humanising of cow's milk, "Zymine" peptonising tubes, Lecithin, Enzymol, &c., Messrs. Fairchild exhibited quite a number of most interesting new preparations from the pancreas gland, some of which are being used with some success, just now, in the treatment of cancer, tumours, and similar growths. The new preparations include—Injectio Trypsini (hypodermic) Lotio Pancreatis (a surgical solvent for the treatment of morbid tissue), "Trypsalin" (also a surgical solvent useful in nose and throat cases), "Holadin" in capsules (a powerful starch-converting and fat-splitting agent), Diazyme (a pancreatic fluid diastase), "Pepule" pancro-hepatic, &c., &c.

Foods, Limited, Stockport, Cheshire.

This was an exhibit of two articles, Moseley's Food, and Moseley's Cocoa, strongly recommended for invalids and children. Moseley's Food is a farinaceous preparation, beautifully fine in grain and possessing an exceptionally pleasant, appetising flavour and is extremely digestible. Dr. R. Hutchinson, in "Patent Foods and Patent Medicines," says that "complete conversion of all starch occurs during preparation." Other notable points are: (1) High percentage of proteid; (2) due proportion of inert fibre and cellulose; (3) richness of ash in phosphates. The food is being largely used as a diet in severe stomach troubles and convalescence. Moseley's Cocoa is a combination of the above food, specially treated, with pure cocoa of excellent quality. The preparation has all the appearance of ordinary cocoa powder and is extremely soluble, little or no residue being left in the cup. The beverage prepared from the powder has the delicate flavour characteristic of the finer varieties of cocoa, and is free from the harshness which makes some brands so distasteful. The addition of the food gives a nutritive value to the beverage which ordinary cocoa does not possess, and this without in any way impairing the refreshing qualities of the pure product. For invalids and convalescents especially it ought to prove a valuable food and stimulant."—(*Edinburgh Medical Journal*, February, 1906). The *Lancet* says: "This cocoa contains the essential elements of a complete diet, proteid, carbo-hydrate and fat, besides possessing mild stimulating qualities owing to the theobromine of the cocoa. The amount of fat proved to be 22 per cent., which is derived in part from the cocoa and in part from the cereal of the food."

Messrs. J. S. Fry and Sons, Ltd., Chocolate and Cocoa Manufacturers (Bristol and London).

A very interesting exhibit was made by this well known firm of their Malted Cocoa and Milk Chocolate. Fry's Malted Cocoa, a combination of Fry's Pure Cocoa and Allen and Hanbury's Extract of Malt, was specially introduced at the request of the Medical Profession, and is now acknowledged as a nutritive and restorative agent for delicate and exhausted constitutions. Both of its constituents being highly concentrated, malted cocoa is economical in use and possesses highly nutritive properties, and on this account can be recommended with great confidence to all. The diastase in Fry's Malted Cocoa makes this Drink-Food a most valuable ameliorative in cases of impaired digestion. Fry's "Five Boys'" Milk Chocolate is pure confection, entirely free from impurities and adulterants. A very high-class article, guaranteed to be a combination of Pure Cocoa with finest sweetened milk from English pastures, which is not only a sweetmeat and a valuable and concentrated food, but is especially suitable as an article of diet for invalids.

The Holborn Surgical Instrument Company, Limited (26, Thavies Inn, Holborn).

This exhibit was devoted to the display of a general assortment of surgical instruments, sterilisers, &c. The make and finish of the instruments was very good, and we were struck by the moderate prices which were asked.

Hooper's Elastic Water or Air-Beds and Cushions (Hooper and Co., 7, Pall Mall East, London, S.W.).

These Beds and Cushions, being of solid elastic rubber, conform to every movement and contour of the body, thereby giving perfect muscular relief. They are invaluable in cases of paralysis, consumption, fevers, rheumatic and spinal affections, the prevention and cure of bedsores, and the general comfort of bedridden patients. Awarded the only Prize Medal International Exhibition, 1862; also First Class Award at the International Medical and Sanitary Exhibition, London, 1881. Messrs. Hooper also had on show a selection of portable urinals, India Rubber Pessaries, Ice Caps, Enemas, Bed Pans in India Rubber and Gutta Percha, Dissecting Gloves and other India Rubber sundries, including waterproof Motor and Driving Aprons.

Hunyadi Janos Natural Aperient Water (Andreas Saxlehner, Buda-Pesth, and Trafalgar Buildings, London, W.C.).

This firm was represented by a display of the well-known Aperient Water, Hunyadi Janos. It is unnecessary to describe this water, which by virtue of its mildness and uniformity of action has become so widely known that it is found in nearly every household. It is undoubtedly one of the best of the Natural Aperient Waters.

Ideal Dairy Company (222, Kensal Road, London, W.).

This firm showed their method of supplying pure milk in sealed bottles, at the same price as that usually charged for milk delivered in the ordinary way, thus obviating all the dangers of the milk can. The Anglo-Swiss Condensed Milk Company, manufacturers of the well known Milkmaid Brand of Condensed Milk, established a fresh milk department at 222, Kensal Road, in the year 1901 with the sole object of supplying the West End of London with pure fresh milk absolutely free from colouring matter or preservative and delivered in white flint glass bottles, instead of the old fashioned and uncleanly system of cans, which even now are carried round the streets open. A certain amount of confusion having arisen through the title of the firm, which led people to think that the milk supplied was either condensed or

Swiss milk, it was decided by the Board of Directors to change the style of title to the "Ideal Dairy Company," which change is now in operation. The milk is purchased from farmers in Berks, Bucks and Oxon, and is sent twice daily to London. Collecting vans meet the milk at the Station and bring it direct to the Dairy, it is then cleansed by a special process, thoroughly cooled, and bottled by machinery. The bottles are closed and sealed at the dairy, which secures the milk being delivered to the public in its original state, tampering with it in any way whatever being impossible. A great many medical gentlemen take their family supply of milk from the firm and continually recommend it to their patients. The milk is neither pasteurised nor sterilised.

Messrs. Ingram and Royle, Limited (26, Upper Thames Street, London).

Messrs. Ingram and Royle brought before the profession the undoubted advantages of Vichy Water and its preparations. This was particularly appropriate on the present occasion, as Sir William Macewen, M.D., recently accompanied Sir William Broadbent, Sir John Moore and Sir John Tyler to Vichy on a special tour of inspection. Although one of the oldest of the natural mineral waters, the popularity of Vichy amongst the medical profession in the United Kingdom increases year by year, there being practically no competition in this particular class of water. The "Celestins," "Grande-Grille" and "Hôpital" springs, have each their distinct uses for affections of the kidneys and bladder, gout, rheumatism, disorders of the digestive organs, &c., whilst the Digestive Pastilles (formed of the Natural Vichy Salt) are a more convenient substitute on many occasions. It is also interesting to note that Vichy Baths at home are now possible, as the natural salt is specially exported for that purpose. One admirable point always urged by the proprietors and representatives of Vichy is that patients should only embark on a course of treatment under the advice and regulation of a medical man.

International Plasmon Company, Limited (58, Duke Street, Grosvenor Square, W.).

This well-known firm exhibited a large number of samples of their famous preparation. Plasmon is the caseinogen of fresh milk dried into a soluble powder by removal of the fat, the sugar and the water, 100 lbs. of milk making about 3 lbs. of Plasmon. This preparation has quickly advanced into favour as a valuable food, and is now made up into many elegant forms, such as biscuits, chocolate, cocoa, beef plasmon, &c., so that it may readily be made use of in the sick room.

R. Reynold Jackson and Company (11 and 13, High Street, Notting Hill Gate, London, W.).

Messrs. Jackson and Company, Limited, showed two very attractive motor cars which were remarkable for their moderate price and good workmanship. One, No. 1 Jackson Dogcart with De Dion Engine, three forward speeds, one reverse, pressed steel frame, machine rivetted, push pedals, all latest improvements including all accessories, £130. One No. 4, 9 h.p. Jackson Side Entrance, with either single De Dion engine, or two cylinder Gnome, complete with all accessories, £210. The "Jackson" cars were put upon the market owing to the continued demand for a reliable and speedy and cheap small car accommodating three or four persons. They have successfully commended themselves to the growing section of the community of automobilists requiring this type of car. While low in price the "Jackson" car embodies in its construction those improvements in design which have proved so successful in the leading and world-famous cars. The

engine which has secured a premier position, a long wheel-base, artillery wheels, efficient brakes, direct driving on the high speed, efficient automatic lubrication, at least two speeds and reverse, long and flexible springs, automatic control of the engine when running free, control of gear by a single lever, efficient cooling by pump and radiator, have all been embodied in the design of the "Jackson" cars. The motor and gear box are suspended from the main frame, which consists of an armoured wood frame superposed upon the main tubular frame, thus preventing distortion by reason of rough handling or shocks. The governing of the engine when the clutch is released from engagement is a most desirable feature. An independent hand-lever control is also fitted. The reliability of the "Jackson" cars, their compactness, smart appearance, popular prices, extraordinary amount of luggage room, and the fact that De Dion engines are fitted, all make them specially suited to the requirements of members of the medical profession. In this connection it is interesting to note that Messrs. R. Reynold Jackson and Company have sold more cars to doctors than to members of any other profession. From personal experience we are enabled to state that these cars are thoroughly reliable, and the expense of upkeep is remarkably low.

Jeyes' Sanitary Compounds Co., Ltd. (54, Cannon Street, E.C.).

Messrs. Jeyes displayed on their stall the many articles for which they are so justly celebrated, chief amongst these being the various preparations of Cyllin. Cyllin is a disinfectant produced from certain numbers of a series of Hydrocarbons guaranteed to be at least ten times less toxic than carbolic acid, and to have carbolic acid co-efficients ranging from 10 to 30. The following preparations of Cyllin were shown:—Cyllin (Medical): A refined preparation of Cyllin for medical and surgical use. Cyllin Inhalant: For use where indicated in pulmonary disease. Cyllin Inhalator: For applying the Inhalant. Cyllin Capsules (palatinoids): For use in stomachic and intestinal antisepsis. Cyllin Syrup: For use where indicated in infantile diarrhœa. Cyllin Dusting Powder: A safe and reliable substitute for Iodoform. Cyllin Surgical Soap. Cyllin Bar Soap. Cyllin Liquid Soap. Cyllin Sanitary Powder. Cyllin Gauze. Lano-Cyllin: For the disinfection of the skin after scarlet fever, &c. Cyllin Pastilles: Antiseptic throat lozenges. Cyllin Rectones: Antiseptic suppositories prepared with Lano-Cyllin.

Keen, Robinson and Company, Ltd. (Denmark Street, St. George's-in-the-East, London, E.).

The following well-known preparations were exhibited: Robinson's Patent Barley. A pure Farina of the finest Scotch Barley. Barley water for summer drink for invalids, and as a diluent of milk for babies, can be quickly and economically made from it. Sufferers from stone or gravel should drink freely of barley water. Barley water as a diluent of milk is being recommended by the medical profession generally. Robinson's Patent Groats. A pure Farina of the finest oats grown in Scotland. Gruel made with milk is most nutritious, delicious and digestible. Suitable for infants when weaned—as it produces bone and muscle—nursing mothers, invalids, and the aged. Colman's Sinapisms are more effectual than those made abroad.

Knoll and Co. (27a, St. Mary-at-Hill, London, E.C.).

At this stand we noticed more especially the following preparations. "Styptol" is a Coutarin preparation, and the most useful Styptic for the treatment of uterine hæmorrhage. It is supplied in tablets and given by the mouth in doses of two to three tablets three times a day. "Styptol" is known to and used by many of the gynæcologists in this country, and described as the most reliable and most effective uterine hæmostatic, which

acts as a sedative without contracting the uterine muscle. "Santyl" is not yet so well known here, but is acquiring a good reputation. It is a tasteless and odourless sandalwood oil, which does not repeat and does not irritate at all. It is being largely used in the treatment of gonorrhœa, and so far the results have been satisfactory. "Diuretin" is too well known to need any description.

Krohne and Sesemann (37, Duke Street, Manchester Square, London, W.).

Great interest was displayed in this exhibit, which, as usual, was noticeable for the beautiful finish for which this firm is famous. It included Mr. Keetley's Splints for diseases and injuries of, and operations on, the hip, knee, and bones of the thigh and leg. Dr. James Mackenzie's Clinical Polygraph. Dr. Hewitt's Mouth Gag for Chloroform. Mr. Richard Lake's hand-power Oto-Masseur, Eustachian Catheters, Labyrinth Chisels and Gouges, Nasal Splints and Curettes, Nibbling Forceps, &c. Dr. Alfred Cole's Metal Box for Microscopic Slides. Professor Snellen's Artificial Eyes. Krohne and Sesemann's Regulating Inhalers for Chloroform, and Lever Springs for correcting the malposition of the great toe, and for the prevention and relief of bunions. Sterilisers for Instruments, Catheters and Dressings. Largiader's Arm and Chest Strengtheners. Improved Aseptic Pocket Cases, Stethoscopes, Ligature Bottles, Uterine Dilators, Tracheotomy and Laryngeal Instruments in Metal Cases, and Chloroform Masks suitable for children and adults.

Lemmon and Company, Limited (7, Great Titchfield Street W.).

This firm is well known for their surgical electrical appliances, and their stand contained an exhibition of the latest productions in this department. The "Cold" Lamp Cystoscope, with latest modification for ordinary examination and also catheterisation, irrigation, &c., is a well-known feature of this firm's production, and there also could be seen Strauss' Photoscope with latest modification, a highly finished and complete instrument. Another speciality of the firm is their Urethroscope, complete with various sized tubes, bellows, &c. Their Glass Rod Lamp, Antrum Lamp, Laryngoscope, &c., are well worth attention, and all these different types of appliances could be seen in working order, the current being supplied by the special type of batteries which the firm produce for use with their instruments. Principal amongst the various types of batteries employed was their No. 477 type, for light and cautery work, the switchboard of which was a very highly finished, compact and unique piece of work. Their No. 471 type battery for light alone was another feature. A point about these batteries is their lightness and portability, which is a decided consideration when purchasing. Messrs. Lemmon and Company also produce a very compact and highly efficient Portable Transformer for light and cautery. A special feature of this transformer is the efficiency of the appliance electrically, 95 per cent. being attained against 80 per cent. or so in the usual types of Transformer. Also could be seen a type of Light Transformer, Snares and Cauteries, and a complete installation for the working of X-Rays. Faradic and Galvanic Batteries were also shown. A particular point in connection with this firm's productions, is the fact that nearly all the articles listed by them are made on their premises, so that no needless time is wasted in despatching repairs to the makers, who are in many instances established abroad.

H. K. Lewis (136, Gower Street).

One of the most interesting publications shown on this stand was the new (tenth) edition of Dr. F. T. Roberts' "Theory and Practice of Medicine," which was reviewed in our January issue. The book is now in two handsome volumes,

with the index repeated in each volume. Another important work was the new (second) edition, of Dr. Emery's book on "Bacteriological Diagnosis." This has been enlarged to the 8vo form, and is now called "Clinical Bacteriology and Hæmatology for Practitioners." Eight new plates have been added, and the book deals with the subject of Opsonins. This is the second of "Lewis's Practical Series," now issued in 8vo. form, the other being Dr. H. L. Jones' "Medical Electricity"; some advance sheets of the forthcoming fifth edition of that book were shown. Other volumes in this series were Parkes and Kenwood's "Hygiene" (second edition), and the latter author's "Public Health Laboratory Work" (third edition), Lewer's "Diseases of Women" (sixth edition), Barret's "Dental Surgery" (fourth edition). The second edition of Rawling's "Landmarks and Surface Markings," which was called for in less than twelve months of the first, was also shown. Some interesting specimen illustrations were also shown from a new book on "The X-Rays in the Diagnosis of Diseases of the Chest," by Drs. Hugh Walsham and Harrison Orton, which will be issued in a few weeks' time. Amongst the new books published since the last Exhibition, were Professor White's "Catarrhal Fevers," Burnham's "Combined Treatment in Diseases of the Eye," Curgenven's "The Child's Diet," Barton's "Ethyl Chloride," and a handy book on "The Public Health Acts and other Sanitary Laws and Regulations," by M. Elliott, Esq. (Barrister), and Dr. G. Elliott. New editions included the seventh edition of Abbott's well-known "Manual of Bacteriology," and the second of Binnie's very successful book on "Operative Surgery." The selection from the Standard Works published by this firm, included Radcliffe Crocker's "Diseases of the Skin," MacLeod's "Pathology of the Skin," Swanzy's "Diseases of the Eye," Osler's "Aequanimitas and other Essays," &c. A new Hæmatological Chart and a Blood Pressure Chart were also shown, with specimens of other charts, case books, &c. The New Sydenham Society's "Atlas of Clinical Medicine," as far as at present issued, with Volume I. bound, was also shown on this Stand, as was a collection of the Society's publications now available for members to choose from under the new rules issued by the Council. A selection of a few of the more important recent text-books and works of general interest, which may be had from the Circulating Library, or ordered from 136, Gower Street, was also shown.

The London Necropolis Company (Established 1852). General Undertakers, Cremators, Embalmers, Proprietors of the Largest Cemetery in the United Kingdom, Sculptors, and Artistic Monument Masons. (Offices: 121, Westminster Bridge Road, and 10, George Street, Hanover Square, W., opposite St. George's Church).

In the present state of society, when by pressure of public opinion the old-fashioned undertakers, with their peculiar ideas and extravagant charges, have practically departed, there have arisen large firms whose business, conducted upon up-to-date lines, appeals not only to a small circle, but to the Metropolis as a whole. Such a firm is the London Necropolis Company, which, founded over fifty years ago, is now practically the premier firm of undertakers in the Metropolis. The reason of their success may be briefly summed up: Moderate charges (which are absolutely inclusive, and vary from £2 2s. to £63), with careful and reverent attention in every case, from the highest to the lowest. It is a strange fact that a portion of the general public consider the business of the Necropolis Company relates to cremation only. The Company were undoubtedly the pioneers of cremation, but it is a mode of disposal of the dead that appeals at present only to the few, and although the Necropolis Company have greater experience than other firms in this respect, cremation is but a minor portion of their business. The Company are the proprietors of the largest and most beautiful cemetery in the country,

namely, Brookwood. No more beautiful spot could be selected. The cemetery itself is of immense extent, in the centre of a lovely country, and produces a sense of peace, quietude and freedom which is sadly lacking in the congested appearance of the cemeteries in and around the Metropolis. At their stall was exhibited samples of the "Earth to Earth" perishable coffin so strongly recommended by many medical men, and also a variety of Artistic Urns in hammered copper, &c., &c.

The Maltine Manufacturing Co., Ltd. (24 and 25, Hart Street, Bloomsbury, London, W.C.).

The following well-known preparations were exhibted by this firm: (1) "Maltine." An extract of Malted Barley, Wheat and Oats. It contains a larger proportion of soluble vegetable albuminoids and important mineral salts than is contained in any other malt extract. (2) "Maltine" with Cod Liver Oil; a combination of "Maltine" and 30 per cent. of the purest Norwegian Cod Liver Oil. By the vacuum process rancidity is prevented, and the odour and taste of the oil are removed. (3) "Maltine" in combination with various medicinal substances. (4) Carnrick's Liquid Peptonoids. A nutritive cordial containing the albuminoid principles of Beef, Wheat and Milk. The preparation contains sufficient alcohol to ensure its perfect preservation, and possesses the flavour of a pleasant cordial or liqueur.

The Manhu Food Co., Ltd. (Liverpool, 23, Blackstock Street; London, 23, Mount Pleasant).

The Manhu Food Co's. exhibit comprised Flour—with which Bread, Biscuits, &c., may be made at home—Biscuits, Flaked Wheat, Flaked Barley, Barley-Cocoa, Prepared Barley, and Macaroni. This year more prominence was given to the Manhu Diabetic Biscuits, of which, in addition to other export orders, nearly 400 2 lb. tins were shipped recently to Australia in response to a cable from a leading firm. These starch-charged foods are better known and appreciated every year, the increased trade showing marked confidence of the medical profession, and patients.

Mayer and Meltzer (71, Great Portland Street, London, W.).

Messrs. Mayer and Meltzer exhibited a selection of their more recent instruments for General Surgery and for Treatment of Diseases of the Throat, Nose and Ear, all made at their London Factory. A large number of antrum instruments were shown, including some new Forceps designed by Mr. Carwardine of Bristol for operating through the Inferior Meatus, and some knives by Drs. Lack and MacDonald for the same purpose. An Aural Massage Apparatus, which, working by hand, gives upwards of 2,000 vibrations per minute. The now well known University Lamps were also on view, both fitted with the ordinary Incandescent Electric Lamp and the Nernst Burner, the latter having been ordered for the King Edward VII. Sanatorium, by advice of His Majesty's Advisory Committee. A good selection of intestinal clamps and instruments for abdominal surgery were exhibited, and a specimen of the latest improved aseptic Instrument Table, designed by Messrs. Mayer and Meltzer, was shown, together with photographs of the Operation Theatres of some of the principal London Hospitals furnished by the firm. That great interest was evinced in Messrs. Mayer and Meltzer's productions by visitors was obvious by the number collected round the firm's stand, examining the various instruments and the beautiful wax models of operations on the Frontal Sinus, Maxillary Antrum and Mastoid, which they inform us are prepared in Paris.

The Miol Manufacturing Co. (66, Southwark Bridge Road, S.W.).

This firm exhibited Miol, an Iodo-Phosphated Emulsion of finest Dextro-Maltose and Natural Oil. A Medicated Food in which the Malt and Oil are intimately combined with Free Iodine and Phosphorous, by a special process original to this company. This novel preparation is prepared with the greatest care, according to the following prescription. Iodine (free), 1·32 gr.; Phosphorous (free). 1·100 gr.; Finest Dextro-Maltose, 40 per cent.; Finest selected oil, prepared from special olives, 30 per cent.; Nutrient excipients, grs. to 100 pts. in each teaspoon dose. Miol is a pleasant tasting homogeneous preparation. It is free from the unpleasant taste and after effects of cod-liver oil, and is therefore readily taken by children as well as adults, and may be prescribed both in summer and winter. It has been tried with singularly beneficial results in Phthisis, Wasting Diseases, Diseases of the Glands and Blood, in Whooping Cough and Bronchitis, and in the various conditions in which a nutrient and tonic treatment is indicated.

Newton, Chambers and Company, Limited (The Laboratories, Thorncliffe, near Sheffield, and 331, Gray's Inn Road, London, W.C.).

Included in their exhibit was an assortment of their well-known and widely appreciated Izal Specialities. The properties of this preparation are unique in the annals of antiseptic surgery for:—(*a*) The active principle having a very high boiling point (commencing above 200° C.), the antisepsis is practically permanent at the ordinary temperature; (*b*) no inert compounds are formed with the tissues; (*c*) Izal appears to act as an epithelial stimulant, promoting healthy but not excessive granulations with speedy epithelial covering; (*d*) when used in a strength of only 1 in 200 it will destroy every variety of the most resistant bacilli in five minutes, while a dilution of 1 in 600 is sufficient to kill the *B. staphylococcus aureus* in five minutes. The medical Izal is put up in glass-stoppered bottles of 4 and 8 ozs., and in Winchester quarts, and has proved itself to be exceedingly valuable in czena, typhoid, erysipelas, diphtheria, fœtid bronchitis, abscesses and old sinuses; it is also a powerful deodorant in cases with an offensive smell. It is ideal in obstetrics. The Izal Perles are strongly recommended as being a convenient form for internal use in typhoid fever and obstinate cases of diarrhœa. Izal Medical Soap is recommended for disinfecting the hands before and after operations, and for antiseptic purposes in the sick room. It is also a useful agent in the treatment of skin diseases. Izal Cream bland and emollient, a very convenient antiseptic application to the skin, and useful for rubbing on the bodies of fever patients during the period of desquamation. The Izal Vaporiser, for use in the Izal treatment of phthisis, croup, whooping cough, bronchitis, &c.

Parke, Davis and Co. (111, Queen Victoria Street, E.C.).

Parke, Davis and Co. showed at their stand examples of all the more important animal products and new remedies introduced by the firm in recent years. The former included all the Serums, and in connection with the most important, Anti-diphtheria Serum, it was pointed out that any risk of the presence of pathogenic organism was absolutely guarded against by the pathological tests to which the product is subjected in the Pathological Laboratory of Cambridge University. The various preparations of Adrenalin, Acetozone, Chloretone and Cascara were shown, together with the Standardised Fluid Extracts for which the firm is famous, Compressed Tablets (sugar-coated and chocolate-coated), Medicine Cases, Hypodermic Cases and the Emergency Case, which has recently become quite popular. The stand, which, as usual, was attractively furnished, was in charge of Mr. Hickey, assisted by a staff of representatives, including Mr. MacAlley, the special representative for West End medical men.

Mr. Frank A. Rogers (327, Oxford Street, W.).

Mr. Frank A. Rogers had a comprehensive show of his well known Sprays and Atomisers, Pharmaceutical Preparations, Sterilised Paraffin and Syringes of various forms for its injection, including the latest patterns for injecting the wax in a solid state, and other specialties. Among Sprays we noticed, besides his "No. I.," which still holds its own as the Standard Medical Spray, the "Aquolic," for oily or thick viscid solutions, a well-made, serviceable Atomiser at a popular price, and the series of "Aquol" Atomisers; two or three quite new patterns, the most novel of which perhaps is "Rogers' Pocket Spray," a compact little instrument in a soft leather case, which can be conveniently carried in the pocket or satchel, and is used without removing it from its case; although specially devised for use with "Mentharenal" in hay fever, nasal catarrh, &c., it is equally suitable for other treatment of nose or throat. The system of spraying sterilised solutions direct from hermetically sealed containers, first introduced some years ago by Mr. Rogers, has been further developed. "Nasules" are now supplied, each containing 1 drachm of solution, such as Supra-Renal Gland, "Mentharenal," Cocaine, Eucaine Lactate, &c.; these, in connection with Roger's "Nasule" Spray, which has been entirely remodelled and improved, present an ideal method of nasal treatment. Mr. Rogers' exhibit was a most interesting one, and can be taken as evidence that he is keeping well abreast of the times.

Society of Chemical Industry in Basle.

Among several exhibits of interest on this stand we noticed a new vegetable phosphorus compound. Phytin is the only natural vegetable phosphorus preparation on the market, and is stated to be the only preparation which allows an assimilation of phosphorus in the body in doses large enough to produce therapeutic effects. The preparation has taken on very well indeed in England, and seems to be of interest to a great many medical men, and the reports sent in show that Phytin carries out what it promises. Phytin is isolated from the seeds of plants (it is the phosphorus reserve material of the green plant), and is supplied in capsules, cachets or granules, at the price of 3s. per 40 capsules.

Virol, Limited (152 & 166, Old Street, London, E.C.).

This firm has gained a great reputation for the valuable food product which forms its speciality. As is well known, Virol is an emulsion of red bone-marrow, malt extract, eggs, lime and lemon juice, and is exceedingly palatable and easily absorbed and digested. It is therefore of great use as a nutrient and substitute for cod-liver oil for children and invalids in all wasting diseases and debility following prolonged illnesses. Virol is being used in over 500 hospitals and sanatoria, more especially in the summer, when it is much more easily assimilated than other fats.

W. Watson and Son (313, High Holborn, W.C.).

W. Watson and Son's exhibit consisted of apparatus for producing X-rays, high frequency currents, &c., the principal feature of which was the "Intensified" Induction Coil, specially constructed for X-ray work. The actual distance separating the secondary terminals is 12 in., but a spark of 16 in. to 18 in. may easily be obtained from the instrument. An estimation of the efficiency of the Coil can be gained by viewing the secondary discharge which with an electrolytic interrupter is extremely thick, and extends the entire length of the coil. With a coil of ordinary construction the electrolytic discharge is not more than one-third the nominal spark length. The "In-

tensified" Induction Coil is provided with sub-divided primary in order that its capacity may be altered to obtain the best results with different forms of interrupters. The same firm also exhibited a number of new instruments in connection with X-ray and high frequency work, and showed several skiagrams taken with their apparatus.

Welford and Sons, Limited (Elgin Avenue, Maida Vale, W.).

A display of Milk Products and Preparations, including Fresh Milk for the Nursery, Asses' Milk, and their well-known Preparations of Humanised Milk in two strengths, the Standard Preparation No. 1 being prepared to correspond to best quality Mother's Milk, and Modified Humanised Milk with a minimum percentage of casein or curd for very young and delicate infants; Peptonised Milk for patients only able to assimilate pre-digested foods; Sterilised Milk as prepared by this dairy, being much in favour with the travelling public and amongst town patrons for use at seaside and country places, where the local supplies are unreliable and lack the guarantee of healthy surroundings at place of production; Koumiss, an old favourite with the medical profession. Messrs. Welford and Sons, having their own dairy, make a speciality of preparing Medical Prescriptions of milk to contain any proportion of fat, milk, sugar, proteids, &c., thus placing within the hands of the medical practitioner advantages which are much appreciated; a display of Apparatus illustrating the analysis of milk; Culture Plates, various Tables, Diagrams, Models, &c., connected with the chemical and bacteriological examination of milk, including the illustration of the comparative resolution of proteids of milk before and after peptonisation.

Whitlock Automobile Company, Ltd. (Holland Gate, High Street, Kensington, W.).

The 8 h.p. "Whitlock-Ideal" Car exhibited by the Whitlock Automobile Company, Limited, Holland Gate, Kensington, W., created a large amount of attention. Many novel features are embodied in its construction, and on account of its general simplicity, flexibility, and silent running, it specially appeals to professional men. Upon making a personal inspection we found that the car is fitted with a four-cylinder engine, each $2\frac{3}{4}$ in. stroke and $2\frac{1}{2}$ in. bore. It is provided with a special patented gear box, with three speeds and reverse. It is so arranged that the wheels are always in mesh, which positively prevents any stripping or burring of the gears. The gears are perfectly silent in changing, and we can foresee an immense future for this type of gear. We should have liked to have given a detailed description and a drawing showing the design and working of the gear box, but Messrs. Whitlocks have asked us to refrain from so doing, as there is a patent pending at the moment in regard to it. The water circulation on this car is also very good, a very efficient radiator of special design being fitted. No pump is required, as Thermo-Syphon water circulation is relied upon. The ignition is by high speed trembling-coil and wipe contact maker, with control lever on steering wheel. The drive is through the medium of a flywheel directly into the gear-box, the clutch being encased in a box. The final drive is from a propeller shaft to live axle. Three very powerful brakes are fitted, two actuated by a side lever. These are the internal expanding type and compensating in action. The footbrake is actuated by a pedal and acts on the countershaft. The car which was on view was actually driven from Paris to London, at an average speed of $18\frac{1}{2}$ miles per hour, being officially timed, the fuel consumption being $24\frac{3}{4}$ miles to the gallon. It is obvious from this that the upkeep of this car is very small. The initial cost of the car is £200, and we would advise all interested to arrange for a trial run at an early date.

There was also shown on this exhibit a 12-14 h.p. four-Cylinder Landaulette Engine, by Aster, Ltd. This is perfectly silent when running, and is therefore eminently suitable for town work.

M. Zaro (108, Fenchurch Street, E.C.).

M. Zaro had on exhibit the various productions of the Carbovis Company of Paris. Carbovis is a raw and pure beef powder prepared at a temperature of 95° from the best parts of the ox. It is free from unpleasant smell and taste, and retains intact all the albuminoids of the original meat. It is, therefore, a natural food which may be mixed or taken with milk, chocolate, soup, vegetables, or mixed with water, and should prove useful for all cases of sickness and exhaustion.

NOTES AND NEWS.

The Annual Conversazione has come and gone. It was not without some trepidation that the members of the Committee responsible for the Exhibition awaited the results of the meeting.

This was the first time that the Exhibition had been held at the Kensington Town Hall, and several members of the Council were doubtful of the wisdom of making a change from Hammersmith. The Council, however, was faced with the dilemma that the number of advertisers who wished to exhibit had outgrown the space in the old hall, and it was either necessary to curtail the size of each individual stall or move to a larger Hall. This was found at Kensington, where not only did we have more space in the main hall, thereby enabling us to bring in more stalls, and to give those who required it larger stands, but we were able to have a separate refreshment room, saving much crushing, and also a much more commodious Lecture Room.

The evening was a decided success, over 200 members and guests of the Council being present, and there is little doubt but that the Kensington Town Hall will now be the established place of meeting for the Annual Conversazione.

We are requested to state that the Memorial Fund to the late Dr. Campbell Pope is still open, but must shortly be closed. Those members who wish to subscribe, but have not yet done so, are requested to send their donations as soon as

possible to Mr. C. B. Keetley, 56 Grosvenor Street, W., or to Dr. D. A. Caley, 24, Upper Berkeley Street, W.

SEVERAL writers have been dilating with enthusiasm on the great advantages of the anæsthesia produced by the intraspinal injection of a solution of stovaine in the lumber region, more especially for patients suffering from acute inflammatory abdominal disease such as peritonitis and appendicitis. From the cases quoted, the local anæsthesia seems to be quite satisfactory, shock, which is a factor of such importance in these cases as a rule, being entirely absent. At the same time, we think that a note of warning should be sounded on the use of this kind of drug, for Dr. Dan M'Kenzie, writing on the advantages of stovaine as a local anæsthetic in minor operations for the nose and throat, mentions the fact that in several instances a 10 per cent. solution applied on tampons to the nasal cavity for short periods caused superficial sloughing of the mucous membrane, while other observers have recorded local gangrene of the skin following on hypodermic injections of a solution of the salt. The strength of the solutions used for intraspinal injections are generally less than 10 per cent., but if, as Dr. M'Kenzie appears to find, the drug exerts a destructive effect on mucous membranes, it is presumably more likely to irritate the delicate nerve tissue of the spinal cord.

We cannot help wondering whether any of these enthusiasts for anæsthesia by spinal injections of stovaine would choose this method in preference to a general anæsthesia, if confronted with the necessity for an abdominal operation on himself.

THE eighth Voyage d'Études Médicales will take place under the direction of Professor Landouzy, from September 1 to 12. Those desirous of taking a most pleasant holiday on the Continent, and, at the same time, acquiring a large amount of experience in the inland health resorts of France, at comparatively little expense, cannot do better than write to M. le Dr. Carron de la Carrière, 2, rue Lincoln, Paris, for full particulars of these attractive medical tours, of which those who have already been speak in the most appreciative terms. The tour this year will include the principal health stations of the Savoie and Dauphiné: Hauteville, Evian, Thonon, St. Gervais, Chamonix, Annency, Aix, Marlioz, Le Revond, Challes, Salins-Montiers, Brides, Pralognan, Allevard, Bouguéron, La Motte and Uriage.

In a paper read before the Society recently on "Infantile Scurvy," Dr. J. A. Coutts related three cases of children suffering from this disease, who were ordered fresh cow's milk, raw meat juice and lemon juice, but in none of whom did speedy resolution of the sub-periosteal swelling take place. It was subsequently discovered that for several months the dairy company which supplied the hospital in which these children were treated were delivering pasteurised instead of fresh milk. On the substitution of fresh for pasteurised milk these children speedily improved. Dr. G. Sutherland, in a letter to the *British Medical Journal* subsequently, has drawn attention to the fact that several of the large dairy companies are supplying pasteurised milk to their customers without any indication that the milk has been so treated. This action on the part of the companies, if a fact, is one of considerable importance. As Dr. Sutherland points out, it is the custom in many households, largely owing to medical teaching, to boil all milk on delivery. If the milk is first pasteurised by the seller and then boiled by the purchaser it will be a poor devitalised sort of a fluid which eventually reaches the infant, and anæmia and scurvy may be expected to follow, and it would be as well if medical practitioners, when confronted with such cases, would make careful inquiries as to whether the milk supplied to the infant had undergone these processes, and take such steps as would ensure the patient being supplied with absolutely fresh cow's milk.

Mr. Herbert Chambers, the Hon. Sec., forwards the following notes on the Army Medical Civilian Reserve:—

The course of lectures terminated on April 28, the series having been a pronounced success. The attendance was well maintained, the average being about thirty. One of the most interesting of the lectures was given by Colonel Firth, R.A.M.C., on a medical officer's duties from a sanitary point of view, especially relating to camps, troops on the march, or aboard ship.

This officer had exceptional facilities of gaining experience and information during the South African War, and is the recognised authority on Military Hygiene; his remarks therefore were of especial interest and value. He pointed out that the success of a campaign so largely depended on keeping down the sick list, that unless the medical officer was alive to the sanitary requirements of an Army, he left on his lines of communication a source of wastage and disaster. A great deal of enteric could and ought to have been pre-

vented in South Africa. Another lecture which might be mentioned was given by Colonel Russell, R.A.M.C,, on "Transport of Sick and Wounded." The evolution of the ambulance was described, great credit being given to Baron Larry, of Napoleon's staff, for organising the first field ambulance in 1792. The transport, under modern conditions, of a wounded soldier from the front to a home-station, was described in detail. A medical officer, we were told, must be resourceful, and prepared to surmount difficulties; for instance, ordinary carts may be made into ambulance wagons, and stretchers from hurdles or barrows. The Japanese did not take any ambulance wagons with them, knowing they could utilise the local carts, which were numerous and adaptable; they did not even take the made-up stretcher, but made use of the bamboo poles which they knew to be light and strong and easily obtained.

Although the lectures are over, the class is continuing to receive practical instruction. Having visited the Herbert Hospital at Woolwich, they have since been to Millbank Hospital and St. George's Barracks for the study of "Recruiting."

At Millbank opportunity was given for the inspection of tropical disease, which so seldom presents itself in a general London Hospital.

The arrangements on the surgical side of this newest of military hospitals leaves nothing to be desired; the staff are very keen and the work done is extremely good.

At St. George's Barracks the raw recruit was seen, not however of the ideal physique associated with the "defenders of our country," but mostly undersized youths, who had failed at various occupations and had taken up the Army as a last resource. We learnt that the irreducible minimum of fitness had been recently lowered in certain respects, notably in the matter of sound teeth. The radical operations for hernia, varicocele and appendix troubles had enabled the aspiring militant to gain admission where formerly it would have been impossible to have done so. It seems curious that there should be no examination of urine in recruiting.

Opportunity will be given on June 23 for the class to observe actual "Field-work," an invitation having been received to view the parade of the R.A.M.C. Volunteers at the Priory, Roehampton, on that date: gentlemen owning motor-cars might be asked to assist in the transport of wounded from the front (in Richmond Park) to the Tent Division (at the Priory).

The future of this movement of civil aid, thus so well begun, is still a matter of conjecture. We have learnt through the

present able Secretary for War, that the Government is alive to the necessity of such help and is prepared to give it substantial support, and it only remains to be seen whether it will do so in a way that will not only attract the younger and recently qualified men, but will enable the more experienced members of our profession to join its ranks.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 71, Holland Park Avenue, W.; those concerning business matters, advertisements, non-delivery of the Journal, &c., should be addressed to the Editorial Secretary, 77, Wimpole Street, W.

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We wish to remind members that our columns are always open to them if they will forward to us papers which may be published as original communications, or interesting cases for the "Mirror of Practice." General practitioners, as well as specialists, are constantly meeting with cases of exceptional interest to all of us, and we shall always be pleased to publish them, if they will send them at least a month before publication.

THE

West London Medical Journal.

Published Quarterly under the auspices of the West London Medico-Chirurgical Society.

Original Communications.

ART AND MEDICINE.

By Leonard Mark, M.D.

"In this work attempts will exceed performances, it being composed by snatches of time, as medical vacations and the fruitless importunity of uroscopy would permit us. And therefore also perhaps it hath not found that regular and constant style, and those assured determinations, which the subject sometimes requireth, and might be expected from others whose quiet doors and unmolested hours afford no such distractions."—Sir Thomas Browne's "Vulgar Errours."

It was early in the summer, when I was spending my holiday in Paris, that it came to my knowledge that I might perhaps have the honour of occupying this chair, and that it would be my duty to choose some subject for an address which, I hoped, might interest you. To tell you the truth, I chose the subject at once. I had been spending several days looking at pictures in Paris; the weather being unusually wet had made me spend many more hours than I first intended in museums and galleries. The result was that my head was very full of pictures, and I felt just then that if I had to talk about anything it must be about pictures, all the more so, because of the great impression which had been made on me just then by seeing a large number of them which contained subjects of medical interest. My attention had been arrested when I had come across pictures in which there was depicted some medical or surgical incident

or in which appeared the representation of an infirmity, a deformity, or a wound, or in which death in its various aspects had a place.

I had unconsciously been analysing many of them and considering whether they were correctly drawn, whether they gave a proper idea of what was intended; I wondered in many cases whether some were true copies from Nature and from what had really been seen; in some instances whether the painting had been done from real wounds, from a dead person, in others whether certain portraits of people, historically known to have suffered from any complaint, revealed it in their counterfeit presentment or not; also whether certain characteristics, depicted in other pictures, showing pronounced illness or abnormality, were painted thus purposely or unwittingly. I thought that here was a subject which was full of interest, and I hoped that if I chose one full of interest to myself I might possibly make it so to my audience. As the idea of this subject developed, I began to observe these particular pictures with increased attention, and on my return to London, I determined to see what our own galleries had to show in this line, my wish being to confine myself to the pictures we have in England.

My first visit was to the National Gallery, and, truth to say, after a first general look round, I was a little disappointed and came away thinking there would not be very much to talk about after all. Another visit gave me much more encouragement, and I found that the National Gallery was true in every respect to the often-mentioned reputation which it has, of being the most completely representative gallery which exists in the world, even if it is far from being one of the largest. I found that it contained some important pictures illustrating subjects which could be described as of pathological interest. At the South Kensington Museum and in other collections in London a fair proportion of pictures were to be seen which came into the category, and I found that in the particular branch which I want to talk about, our British collections and museums are quite equal to the Continental ones, although there are several points of difference.

If we wished to trace the origin of the arts we should have to go back to the earliest dawn of man's appearance upon this planet. Man's mind must very early have been im-

pressed with wonder by the phenomena that surround him, by the world's beauty, the great questions of life and death, of pain and disease, and to this feeling must soon have been added the desire to give form, in some sort of way, to his impressions, so that they might live for others. Words were the first means of expression that came to him, and poetry the first art his intellect created to give shape and colour to his thoughts. Very early must descriptions of death, of wounds, of suffering and illness, have found a place in art. Some of the descriptions in Homer's *Iliad* are most vivid and full of details.

The next art to arise was sculpture, dealing with material forms, which require but to be copied with skill and accuracy.

Painting was the later-born art, as the application of colours to a flat surface and the reducing of seen objects into perspective were a more complicated process.

But when the art of painting was acquired, man had a more comprehensive means at hand to express what he saw, what he felt, what he admired, and his art became universal, in that nothing in nature, nothing human, could be foreign to it. The art of painting, devoted in the early days to the service of religion, or the record of heroism, eventually became a means of depicting events and subjects of most varied character, but always chiefly those of human interest, in some of which medicine occupies a conspicuous place.

Medicine may find a place in paintings for several reasons. I think the greatest reason of all is to excite a *sympathetic emotion*, for the subjects chosen for pictures are often scenes connected with sickness or death. Or some touching episode in a domestic or historical drama may be represented, in which one of the details is of a medical nature and must find a place to explain the rest. Or it may be brought in for *contrast*, as when a deformed or diseased person is depicted, so as to act as a contrast to another fine or well-proportioned figure. This is very frequently seen in the old masters, as I shall show you further on, and the tradition has been kept up even in later days, a well-known example being that of "The Contrast," by Lord Leighton. Here deformity is brought in with the object of enhancing the beautiful. Leonardo da Vinci said that "Contrast was essential in a work of art."

Medicine may be but a mere detail in a picture, and the

detail may be brought in by the artist by a few touches of his brush, yet it may be the point round which the interest of the subject centres.

We might roughly divide the pictures of this class into two large groups :—

First : those of the old masters, dealing mostly with heroic, biblical and religious subjects, in which the plague and leprosy with their sores, the martyrdom of saints with their various wounds, death in its many aspects, had to be represented. It is easy to understand the important place which such subjects found in art during the period of its revival in the middle ages, when we remember that it was one of the principal means of teaching the people the history of the Bible and of the saints before the days of printing.

The second great group is that of modern pictures, and here the drama and romance seem to me to have inspired most of the subjects which come into the category, to which we may add scenes from history and scenes from every-day life, in which something medical is just as likely to find a place as some detail connected with architecture, navigation, hunting, sport, the naval and military sciences. For art is universal and calls to her aid every chapter in life and every science.

Whenever medicine is brought into art, good taste demands that any morbid detail should be but an accessory and not be painted as the essential part, or in such a manner as to take away the attention from the main idea which the painter desires to express. The painter's knowledge of pathology can be but slight, and he should make use of it merely as a means to an end ; it must not be his object. But we wish him to be correct, and a medical man likes to see medical details in a picture carried out faithfully, just as a military man likes to see military details treated in a battle scene, or a sailor the details in the rigging of a ship. I believe that no class of men criticise pictures more keenly than the latter. We like to judge how far the artist has been sincere in his observation, but we should not expect him to produce any realistic displays which would jar upon our better feelings. The artist must often judiciously put some detail of his picture in the shade or merely give an indication of it. If it be true that the highest art is to hide art, it is often also true that it is high art to hide a morbid detail.

(1)

Detail from Raphael's Cartoon. "ST. PETER AND THE LAME MAN." *South Kensington Museum.*

(2)

Van Dyck. "ST. MARTIN DIVIDING HIS CLOAK." *Windsor Castle.*

In this paper I wish to talk only about pictures and works of art which we have in England. To attempt to talk about what there is in the continental galleries would open up too wide a field. This has already been very ably done by Dr. Paul Richer who, when house-physician under Dr. Charcot, at the Salpêtrière, illustrated that great master's works with some admirable outline drawings. The great book he has written on "l'Art et la Médecine," contains an immense fund of interesting information, and I am indebted to it for some valuable suggestions.

The first pictures that I wish to bring to your notice are some of those by the Old Masters.

The Old Masters.

In the first rank amongst the great works of art in England we ought to place the Cartoons of Raphael, now at the South Kensington Museum. The subject of one of them is St. Peter and St. John healing the lame man at the Gate of the Temple. The scene is a striking one, the moment chosen being the one just before the miracle. In the foreground in the centre of the picture is seated "the lame man from his mother's womb who was carried daily and laid at the gate of the Temple, which is called Beautiful, to beg for alms" (fig. 1). Attention is at once drawn to his legs. They are doubled up, the knees being flexed at an acute angle, especially the right one, which is raised so as to bring into view the right foot, which is so extremely distorted that the plantar surface is looking upwards. The muscles are wasted and the large pendulous toes look livid. The toes are much distorted in the left foot, the big one being bent upwards at a right angle to the dorsum of the foot.

Raphael probably chose for his model a beggar who had suffered from infantile paralysis. He has a low receding forehead, a low bridge to his nose, very brilliant eyes which are deeply sunken in their orbits, a large prominent jaw and big ears. His general aspect suggests a man who had had rickets.

When painting this cripple, Raphael very likely had two different models that he amalgamated. He may have done here what he did when painting a beautiful woman. He is known to have declared that a perfectly beautiful woman is

so rarely met with, that he was obliged to take the various features from different models to produce a perfect picture.

Sir Charles Bell mentions in his book on "The Anatomy of Expression," that in visiting the Church of the Annunziata, in Genoa, he found a beggar lying in his way, the precise figure of the lame man in the cartoon of Raphael.

The lame man is staring at St. Peter with open mouth, his face expressing his astonishment at the notice which is being taken of him. St. Peter is standing in the middle holding up the cripple's hand. He has a commanding look and his position is full of dignity. With one hand he holds the cripple's wrist while he raises the other to render more impressive the words he uses: "Silver and gold have I none; but such as I have give I thee. In the Name of Jesus Christ of Nazareth, rise up and walk."

St. John has also a prominent place in the picture, and helps with St. Peter to form a contrast to the cripple in the central group, and the other cripple who is kneeling between the columns on the right. This one has a round prominent forehead and a low bridge to his nose. His thighs are conspicuously short, and he has also suffered from rickets. His face is full of expectation and hope.

Extra charm is given by the introduction of a mother and her child, one of Raphael's most beautiful creations.

In this picture Raphael must have made a very exact copy of the deformity of his model, but brings it in merely as an accessory. He has studiously thrown a veil over all the morbid part of the cripple's legs by means of a cast shadow. The lame man is carefully placed between the columns, so that the shadow of one of them crosses his feet and knees. It took me some time and trouble to make out the exact outline of the limbs owing to the painting, which is *in tempera*, having become darker after four centuries of exposure. In the sketch which I show you I have left out part of the shadows, so as to bring the legs and feet more prominently into view.

One of the criticisms made against the picture is that these columns, owing to the way they are placed, cut up the subject and divide it into three groups. They are highly decorated and obviously not Jewish, but a creation of Raphael's imagination. I believe it quite possible that they formed part of his design for hiding the hideous parts of his subject.

(3)

ɔrando. "St. Roch and the Angel." *National Gallery.*

(4)

Gerard Dou. "Le Mal d'Amour." *Buckingham Palace.*

One would like to dwell lengthily on this picture, as it is one we may be proud of possessing in England. It is one of a group of ten pictures which were designed about the year 1520 under the directions of Pope Leo X., and intended for tapestries for the Vatican. They were originally ten in number, but three were lost, and the remaining ones were purchased for the nation by Cromwell for the sum of £300.

One of the other cartoons has a subject which it would be interesting to talk about here, "The Death of Ananias," but I prefer passing on to the works of other painters.

St. Roch and St. Sebastian.

One of the greatest scourges mentioned in history was the plague, and very naturally the painters of the middle ages who were brought face to face with it, found it a fruitful subject for their brushes. Anyone reading Boccaccio's vivid account of it will understand how greatly it must have influenced life in those times, and how the people must have sought for measures to avert it. Religion was appealed to for its protection, and art recorded its ravages. Just at the time of the great revival of art, and when the plague was creating the greatest havoc, two saints came prominently into notice and were constantly appealed to for protection. They were St. Roch and St. Sebastian, and to represent them in painting or statuary became a grand opportunity for artists; hence the frequency with which we meet with pictures of them. They are often represented together as joint protectors against the plague.

St. Roch is especially interesting to medical men, and might rank as one of the first of their patrons. He is at once recognised in pictures as a man in the prime of life, habited as a pilgrim, with a cockle shell in his hat, holding his staff in one hand, while with the other he lifts the corner of his cloak to show the plague spot on the upper part of his thigh, or points to it.

His legend is comparatively modern and tolerably authentic. He was born at Montpelier, famous as the seat of one of the earliest Schools of Medicine. He was of noble parentage. When he came of age he disposed of his riches and started on a pilgrimage to Rome. In several cities on the way the plague was raging, and he stopped to minister to those

who were stricken. He found that this was his true mission, and devoted himself to the sick in the hospitals at Rimini until at last he was himself attacked by it. Left to himself, he lay in the outskirts of the town expecting to die, but a little dog, who had followed him in all his journeyings, used to go into the town every day and return with a loaf of bread in his mouth, and thus kept him from starvation. An angel from heaven, says the legend, used to come and dress his wounds and minister to him in his solitude. He recovered from the plague and returned to his native town, where he died on August 16, 1327.

It was in the year 1414, during the Council of Constance, when the plague broke out in that city, that an effigy of the pilgrim was carried through the streets and the plague ceased. His fame spread over Europe and innumerable pictures of him were painted for the churches on the continent.

The National Gallery contains several pictures in which St. Roch is figured, generally in groups with other saints; but the best one of all is a beautiful picture by Morando of the Verona School, "St. Roch and the Angel," a work which ought to be better known, being one of the finest examples of the subject (fig. 3).

The saint is represented as a young man with delicate features; a refined and compassionate expression. His pale, somewhat dusky complexion, his long, thin hands, his brilliant but sunken eyes, his open mouth, all help to denote a sufferer from some severe illness. His clothing is drawn aside by his hand to lay bare the upper part of the right thigh, according to the tradition, and expose the plague spot. High up, in the middle of the shadow of the cloak, there is a thin ray of light, which is all that indicates the seat of the sore. But a mysterious sort of light emanates from the part, and illuminates the large fold of the red cloak and the fingers of the left hand with a glow which is more than can be accounted for by the light descending from the angel above.

The usual attributes appear. The pilgrim's staff is planted in the background, and on it hangs the pilgrim's hat. In front is the little dog, his companion in his wanderings. The background consists of some oak leaves growing from short stout branches, and their sturdy appearance forms a

(5)

Hogarth. "THE POOL OF BETHESDA." *St. Bartholomew's Hospital.*

(6)

THE GREAT SEAL OF EDWARD THE CONFESSOR. *British Museum.*

great contrast to the delicate figure of St. Roch. The rose which his hand has dropped on the ground at the sight of the angel denotes his æsthetic tastes. The angel above him is blessing him with his right hand, while with his left he points to the distant horizon whither the pilgrim must wend his way, and where he is wanted for further deeds of self-sacrifice.

The other saint that I wish to talk about as having occupied an important place in art, is St. Sebastian. This martyr is always represented tied to a stake, with his body pierced with arrows. In our National Gallery I have counted eight pictures in which he finds a place, and I have been much interested in studying the various ways in which the arrows have been depicted penetrating his flesh. Some of the methods adopted are purely conventional. In one of them six or seven arrows are drawn exactly alike and under each one is painted a group of five drops of blood, which one cannot help remarking, look like a small bunch of currants hanging from the arrow. In another there is an arrow entering the neck, and the artist has drawn it piercing the clavicle, regardless of the fact that the clavicle would cause it to make some deviation. In one there is an arrow penetrating the temple while the saint continues to have on his countenance a placid smile, although such a wound must have caused instantaneous death.

Apart from the medical question some of these artists have shown their ignorance of the legend, which says that the martyr recovered from his wounds without the help of any miraculous agency. Sebastian was a young nobleman commanding a company of the Pretorian Guard in the reign of Diocletian. He professed Christianity in secret until it came to the knowledge of the Emperor, who ordered him to be tied to a stake and to be shot to death with arrows. He was left for dead, but was carried to the house of some friends who found that none of his wounds were mortal and who nursed him most carefully until he recovered. He afterwards had the boldness to present himself before Diocletian, whose anger was roused and who this time ordered him to be dragged to the circus and to be beaten to death with clubs.

In art his importance at once secured him a prominent place, and an opportunity was furnished for artists to display

the beauties of the human form. St. Sebastian gradually acquired in the art of the early ages of Christianity a place similar to that occupied in heathen art by Apollo, the father of Æsculapius. This divinity was represented with a bow and arrows, and he had the power of sending sudden death and the plague with them to man for his punishment, but at the same time of delivering him if duly propitiated. Arrows were always symbolical of the plague and remain so to this day in the east.

The martyrdom of the Saint was found to be an admirable subject for the display of elegant forms and fine anatomical modelling. One of the finest specimens is the picture by Guido at the Dulwich Gallery. Here the human form in all its beauty is shown and the pose of the figure is a striking one for its grace. There is only one arrow depicted, and that attracts very little attention as it penetrates the side, in the shade, just below the ribs.

Wounds in Painting.

Sometimes they are very conventional in the way they are represented, and at other times, when the artist has apparently been careful to avoid any morbid detail, they may be merely indicated. In the National Gallery are many representations of the Saviour after the crucifixion, in which his wounds are figured. In the fine picture by Giambattista Cima, "The Incredulity of Thomas," the hands and feet of Christ have merely a little red patch, looking like a wafer applied on the instep and the back of the hand. There is no attempt to represent any bruising or laceration of the flesh. The red spot on both sides is placed immediately over the metacarpal bone of the middle finger, regardless of its position, and the artist leaves it entirely to the observer to imagine that a nail could have pierced the hand.

Joseph Ribera, known as Spagnoletti, one of the most able of the so-called naturalist painters, and one of those who set the example to a class of painters who became known in Italy as the *Tenebrosi* and *Naturalisti*, painted a fine picture of a dead Christ now in the National Gallery, to which I will refer again when speaking of the subject of death. In this picture he has represented a real wound on the instep of the left foot, but it is one which has been made in the flesh of his

model after death. It is a clean cut incision about two inches long. The edges of the skin are gaping and show the subcutaneous tissue perfectly free from any extravasation of blood. Looking more closely into the picture, one sees the deep fascia over the muscles of the dorsum of the foot. There is no trace of any tearing or bruising. I have thought that the foot in this picture would be a very good illustration for a book on forensic medicine, as a type of a wound made in the skin after death.

Although authorities are forthcoming who uphold that no object is really ugly, yet a wound or a sore if it has to find a place in a picture may be a ghastly object. It is the true artist's aim to see that it is not so, and he must use the many means at his disposal for rendering his subject faithfully without shocking the susceptibilities of the most delicate person. Too much importance must not be given to a morbid detail. He must be careful that the proper balance of his work should not be upset, and that by producing too harsh or too deep a note he does not destroy the harmony and thus fail to execute a work of art, and bring forth something for his fellow men to admire.

Leprosy and other Diseases.

There is in the Royal Collection at Windsor Castle, a very striking picture by Van Dyck, called "St. Martin Dividing His Cloak," which contains a very vivid representation of a sufferer from leprosy, the other disease which was so prevalent some centuries ago, and which, therefore, was bound to find its place in art (fig. 2).

St. Martin, the Roman solder, who lived in the time of Constantine the Great, is seen on horseback in full military attire. The armour which he wears is a beautiful specimen of that which was worn in the 16th century, but this, of course, is an artistic licence. With his sword he is cutting off a portion of his bright scarlet cloak to give to one of a group of beggars in the right hand corner of the picture. Two of these beggars are probably lepers. When I went one day this summer to Windsor to see this picture, I was fortunate enough to be accompanied by my friend, Dr. Abraham, one of our great authorities on the subject of leprosy. We had a very careful look at the picture, and as

this may have been the first occasion on which a specialist in leprosy has done so, I think it would be interesting to give here a few notes we took at the time.

The man in the centre of the group has a face which is typically that of a leper. There is a nodular ulceration on the left eyebrow, showing below the edge of the bandage which is round his head. The bridge of the nose has fallen in. The nodular condition is apparent on the alæ of the nose and all round the mouth. Both lips are much swollen. There is nodular thickening on the upper part of the pinna of the left ear. There is apparently an atrophic condition of the left foot and ankle. On the right heel is some ulceration, and the left leg, near the knee, shows some markings.

The other man, who is turning his back to the observer, appears to have some ulceration on the right ear. His left hand, which is grasping the edge of the cloak, is thickened, and the fingers seem to be ulcerated. He, too, might pass for a leper.

The child held up by the gipsy woman is distinctly hydrocephalic; it has a small, wizened face, with a pinched expression.

This picture was wrongly ascribed to Rubens for a long time after being brought from Spain in 1750, and still appears under his name in some lists of pictures. Its style and the grouping of the figures, which is similar to that in other pictures of the same subject by Vandyck, tend to show that it is the work of his brush.

St. Bartholomew's Hospital possesses two very large paintings by Hogarth, which form part of the decorations of the walls on the staircase leading up to the great hall. They have been a source of interest to many generations of the Hospital's students, as they are full of matter to attract the medical or surgical eye. One is known by the name of "The Pool of Bethesda," the other "The Good Samaritan." The first (fig. 5) contains a whole group of sufferers surrounding the Saviour, who stands near the edge of the pool. Beneath, forming part of the design of the artist, is a panel containing the words from St. John's Gospel which help to explain the picture.

The cripple is seen sitting up on his bed in the middle of

THE DWARF TUROLD IN THE BAYEUX TAPESTRY.

ANTIQUE STATUETTE OF A DWARF. *British Museum.*

the foreground, he has a bandage round his head, and he has just removed the bandages from his leg, which in the oil painting shows some ulcers. Dr. Norman Moore has made a very careful study of this picture, and I am indebted to him for a very interesting clinical demonstration, which he gave me one day at the hospital, on the patients who are represented surrounding the pool. Going from right to left we notice a man with thin, pale face and painful expression, with his right hand on his swollen abdomen, possibly a sufferer from cancer of the liver. Then a woman who has patches of psoriasis on both knees and on her right elbow. She is turning her face away from the Saviour. The tradition of the hospital is that this is a portrait of a well-known courtesan, Mistress Wood, who lived at the time in the city. The woman at her side is her maid. Then comes a woman with a baby who obviously has rickets. The expression of the baby's face is typical. It is very pale and ill-nourished, with large joints. Immediately behind the Saviour stands a woman with painful countenance raising her arm to her head and exposing an abscess in her breast. In the picture her pale face forms a great contrast to the red patch of inflammation on the breast. The man with his hand bandaged up has the face of a hard drinker, and suggests a case of gout. The woman in the back ground must have acute melancholia. The next case is not so clear, and it is only on referring to the lines of Scripture and finding that the blind are mentioned first amongst the impotent folk, that one ventures on a diagnosis.

The last two female figures represent the two different forms of consumption that used to be talked of. The extremely emaciated woman is clearly a case of very advanced phthisis. The other one with the red cheeks, the thick lips, the short, thick nose, represents the strumous or scrofulous type. In front there is a woman with bandaged feet.

Hogarth has been very successful in representing the sufferers, and no doubt had excellent opportunities for choosing his subjects from patients in the hospital, as he lived just outside the gates. One cannot help remarking that there is a want of dignity about the figure of Christ. He looks short in stature when compared to the other people in the picture. The tradition has not been followed here of adding to the

importance of the performer of a miracle by representing him on a larger scale than the other figures, at one time a recognised convention.

The picture is also interesting, because it is the first and only great picture by Hogarth devoted to a serious subject. He, the greatest of all satirical painters, believed to his last days that he was destined to be a historical painter, just like Molière, who believed to the day of his death that his true calling was the acting and writing of tragedy.

In another of the Royal Collections, the one at Buckingham Palace, there is a picture I must bring to your notice, with a subject of a somewhat lighter character than those I have been speaking about. It is generally known as *Le Mal d'Amour* (fig. 4), and is by Gerard Dow, the famous Dutch artist, who painted several pictures of a somewhat similar subject, the finest of all being now in the Louvre, and known by the name of *La femme hydropique*. The present one shows the doctor raising the urine glass to the light, while he holds his fair patient's hand; but she does not look seriously ill, nor show any of the signs of dropsy, like the patient in the Paris picture. She strikes one as being chlorotic, and the paleness of her face is enhanced by the fly blister which is applied to her temple, no doubt to relieve a sick-headache. Her hand, placed upon her heart, lets the observer into the secret of her trouble, whilst the quaint, suspicious look which she directs towards the glass held up by the doctor, suggests that she is afraid he may fathom her secrets more deeply than she would like. On the table is the love letter she has just been reading. All the details are highly finished, as is usual in Dow's pictures. By the inkstand one sees her potion, standing in a small flask, the mouth of which is closed with a little cone of paper, a practice still kept up in many of the continental hospitals.

History.

Leaving pictures of the old masters, I pass on to pictures connected with the history of England.

The diseases and infirmities of some of our sovereigns and of other famous personages have often found a place in history, and occasionally have done so in art, affording an interesting subject to the curious.

Edward the Confessor is one of the earliest kings about whom anything of the sort is mentioned. He was always described as of middle stature and kingly mien, his hair and beard being of snowy whiteness; his face was plump and its pinkish colour was constantly referred to. He was, doubtless, an albino. The many representations of him in coloured glass windows and in illustrated manuscripts of the Middle Ages give him that appearance, and the colour of his face is always a great contrast to that of any accompanying figures. But these, of course, are works of later centuries. Of his own time the impressions of his great seal are all we have left to show what he was like (fig. 6). The face on some of these, preserved in the British Museum, certainly suggests that it might be that of an albino. The plump cheeks and nose are remarkable. The sharp line between cheeks and beard show that the engraver wanted to produce the effect of colour-contrast between the two. The eyes are small and high up. It appears to me that no great straining of the imagination is required to take the effigy on the seal for the representation of an albino.

Edward the Confessor was the first sovereign who touched for the *Evil*, and he had a great reputation for curing people with ulcers. This is what he is shown to be doing in many of the illustrations found in the mediæval manuscripts.

Keeping to the chronological order, we now come to the Norman Conquest. One of the most graphic records of that great event is the tapestry of Bayeux, a roll 20 inches broad and 214 feet in length, worked in woollen thread of different colours. It is preserved now in the prefecture of Bayeux, but is said to have been worked in England after the Battle of Hastings.

Although the design is very rudimentary in point of art, it is regarded as a very faithful representation of many details. I show you here a sketch (fig. 7) from a small section of the reproduction which was made of the tapestry for the Society of Antiquaries in 1816 by the artist Stothard. You see the two ambassadors sent by William of Normandy to Harold of England. The interest of this section is centred in the dwarf, *Turold*, who is holding the reins of the two horses. He is very short in stature, about half the height of the other figures. He has a fully developed head and is long in the body, but his

limbs are short, and his arms are specially so. His head is closely shaven, which distinguishes him as one of the Normans, and he has a full beard.

I think one may venture to say that the appearance of this dwarf is suggestive of a case of achondroplasia, one of those conditions which have been included in the category of congenital rickets. His name being conspicuously written over his head, between two lines, shows that he must have been an important character, and that he must have been picked out for a place in the picture on account of his peculiarities, which had struck the designer of the work.

Or he may have been merely one of several dwarfs brought over to England by the Norman knights. It is well known that in spite of their shortened limbs these dwarfs are very strong, and the knights may have found their backs useful to step on when mounting their horses.

In fact, imagination might lead one far afield when studying this interesting tapestry. We have often heard of the blue blood introduced into the Kingdom at the time of the Conquest, and we know the pride with which some noble families trace their descent from the Conquerors. Who knows whether some of the dwarfs we occasionally meet with in our streets might not trace their descent from Turold, and whether achondroplasia might not have been imported by him into England at the time of the conquest? But perhaps, as Horatio remarked to Hamlet, "to consider thus would be to consider too curiously."

Richard III. is often mentioned as being a hump-backed man, with the left shoulder higher than the right. There are several of his portraits taken from life, and the one which is considered the best is now hanging in the library of the Society of Antiquaries. Nothing in this portrait indicates any deformity. The artist may have been a courtier, and perhaps avoided recording in his work anything which was likely to displease his sovereign. Whatever may have been his infirmity, it could not have interfered much with his performance of feats of valour at the Battle of Bosworth.

Of Edward VI., the boy king, who died of consumption, aged 16, there are also many portraits, several of them by pupils of Holbein. One of these, preserved at Windsor Castle, shows a boy with refined and delicate features, in

whom some suggestion of consumption has often been looked for. I cannot say that I could see anything in the picture indicative of the disease.

There was, however, a highly finished portrait of the boy king by William Streates, a pupil of Holbein's, which I saw at Christie and Manson's rooms four years ago, at the sale of Sir Charles Robinson's collection. Here the emaciated face, the paleness of the skin, the hectic flush in the cheeks, the long tapering fingers, the whole aspect, suggested most obviously advanced phthisis. I wish I had been able to show you a photograph of this picture, but on making enquiries I found that it had passed through an agent's hands to an American collector, and had been lost to our country.

Queen Mary I. is another sovereign whose ailments are often spoken of in history. She died at the age of 42, probably from malignant disease, the sequel to a long-continued functional disorder of the ovary. The dropsy, which had been an important symptom, was mistaken by her for pregnancy, one of her greatest hopes being to have an heir to succeed her on the throne.

Sir Antonio More, who painted several portraits of her about the time of her marriage with Philip of Spain, also painted one at a later period of her life, which is now in the Prado collection at Madrid. The photograph of it, which I show you here, makes her look much older than 40 years, her age when it was supposed to be taken, and gives her the peculiar appearance sometimes seen in sufferers from ovarian disease.

Before leaving the subject of portraits of historical personages, I ought to refer to the family in which albuminuria had been hereditary for four generations, about which Dr. Howship Dickinson was kind enough to give me some information. His account of the family is to be found in the *Pathological Transactions*, from which I extract what follows: "The family is an ancient one. Portraits have been preserved from as far back as the time of Edward IV., and I am informed that they generally display, whether from time or disease, a peculiar transparent pallor, like that which prevails among the living members. I can imagine one of this gallery of pallid ancestors addressing another, *mutato nomine*,

in words which were used at a scene in which one of them bore a part :—

> "Look I so pale, Lord Dorset, as the rest?
> Aye, my good lord; and no man in the presence,
> But his real colour hath forsook his cheeks."

Dr. Dickinson gives particulars of nine members of this family group, illustrating the nature of the disease.

Statuary and Carving.

Leaving painting now for a short while, and passing on to statuary and carving, I find a few interesting subjects to engage your attention. In Westminster Abbey, amongst the effigies of some of our kings and queens, there is nothing to denote any morbid peculiarity. None of them have been portrayed to show the effects of death, like some of the kings of France, whose tombs are in the Cathedral of St. Denis. On one of these, the tomb of Louis XII. and Anne of Brittany, the effigies are two masterpieces of sculpture. The two dead bodies are lying uncovered, and the artist has so scrupulously rendered every detail, that he has even shown on the abdomen the incisions made for embalming the bodies and the sutures with which they have been closed.

In the Abbey, the tomb which seems to attract the most attention of the public, partly for its artistic merits and partly for its theatrical effect, is that of Lady Elizabeth Nightingale, a fine piece of sculpture, the work of Roubiliac. The lady is represented expiring by the side of her husband, who supports her with one hand while with the other he repels Death, which, in the shape of a skeleton, is emerging from the vault beneath and aiming his dart at the lady. This skeleton, partly concealed in loose folds of drapery, is a wonderful piece of sculpture and a study for the anatomist. A fine contrast is expressed by the artist in the extreme state of collapse of the lady and the energy and vigour of the husband, whose face is full of horror.

In the Abbey we again come across St. Roch and St. Sebastian. There are statues of the two saints to be seen in the imagery surrounding Henry VII.'s Chapel. They are both easily recognised by their traditional attributes. The statue of St. Roch is high up, just over Dean Stanley's tomb. These statues were formerly in the Chapels of Our Lady and

AN ANCIENT DOCTOR'S SIGN BOARD. *Royal College of Surgeons.*

Henry Wallis. "THE DEATH OF CHATTERTON." *Tate Gallery.*
(By permission.)

of St. Erasmus, which once stood on the spot and were pulled down to make room for the present building. Erasmus, the saint we meet with here, was a contemporary of St. Sebastian, who also suffered martyrdom under Diocletian, and became the patron saint of mariners. He was cut open and his entrails wound off on a sort of wheel such as is used to wind off skeins of wool or silk. One of the treasures preserved in the library of the Society of Antiquaries is an ancient picture by an unknown artist of the fourteenth century, which represents the scene most vividly. The intestines of the saint are being drawn from a wound which is well worth studying. A median incision has been made in the abdomen starting from just below the umbilicus and reaching to a point just above the pubis, such as a surgeon of the present day would make when about to perform a laparotomy.

There is a relic of bygone days of especial interest to our profession now to be seen in the entrance-hall of the Royal College of Surgeons. It is the sign-board of a doctor of the seventeenth century, and I am able here to show you a photograph of it which I got leave to have taken, through the kindness of the President of the College (fig. 9).

The sign-board is about three feet square, with figures arranged in groups, carved in wood in high relief and painted. The design is very bold, so that the figures catch the eye, and the meaning of each group is apparent at once. The art is somewhat rudimentary, and one cannot help being struck by the shortness of the central figure of the doctor. The artist seems to have omitted to allow him any hips, or to have made his thighs start from the level of the waist. This figure is probably a likeness of the doctor. He is in Jacobean costume, with a short cloak and a large ruffle. In his hand he holds a roll of papers. He wears a beard and moustache. The costume and the whole get-up make one think that the learned doctor must have tried to impress his patients with his knowledge and importance, by aping the appearance of his sovereign, James I., the Solomon of the North, who in the year 1623 had been twenty years on the throne.

Behind the doctor are three shelves with drug pots and bottles. The seven surrounding panels contain scenes of the doctor's daily work. First, and perhaps in his day the most

important, is the scene of a patient being bled. The woman is grasping a staff in her right hand and holding the bowl to receive the blood in her left, while she turns her face away.

The middle top panel is the most interesting. Here the doctor is holding up the urine glass, while the patient, who is lying on the bed wrapped up in blankets, is evidently dropsical and suggestive of "the large white man with the large white kidney." The grouping in this division has no doubt been inspired by the pictures of some of the Dutch artists with whom the urologist was a favourite and frequently recurring subject.

We notice in the other squares: a soldier having his dislocated shoulder reduced; a woman with a large abscess of the breast about to be lanced; a man sitting upright on a chair to have his leg sawn off. The two groups below show on one side the doctor about to lance an alveolar abscess in a man with a swollen face, and on the other side the doctor examining a soldier's arm for an injury.

Beneath are the words from Ecclesiasticus: "*Altissimus creavit de terra medecynam et vir prudens non abhorebit illam. Anno Domini*, 1623." The words are in the evening lesson for St. Luke's Day.

This sign-board was in the collection of the late Mr. Manley Sims, who, I am informed, purchased it at a second-hand shop in London. It was said to have come from Pool, but nothing further can be traced of its history.

There is at the British Museum a small statuette, carved in ivory, which is a very finished piece of workmanship of the Græco-Roman period (fig. 8). It represents a dwarf with Pott's disease, sitting on a small pedestal with his legs doubled up. His right shoulder is very much raised, and the front of his chest very prominent and pigeon-breasted.

Amongst the terra-cotta statuettes remaining from the Greek period a good many are to be seen representing monstrosities, but it is rarely one is found for which an individual with a definite disease has been chosen for a model. Dwarfs with achondroplasia are sometimes found. The additional interest in this one is that it is one of the very rare specimens carved out of ivory.

A better known piece of carving representing a monster is the Lincoln Imp, the main point of interest to be mentioned

here being the well-defined hare-lip. It is a grotesque, to be seen below one of the corbels in the "Angel Choir" of Lincoln cathedral.

Death in Pictures.

We pass on now to the great subject of death, which, in its many aspects, whether before or after the supreme moment, has called forth the abilities of artists in all ages and all countries.

We have but few examples left from ancient Greek artists, who sought to represent in their work the large and eternal features of human nature, and were remarkable for the *reserve* they displayed in portraying joy and grief. Nothing strikes one more than this when looking at any of the ideal figures sculptured on an Athenian tomb.

In the Middle Ages, and with the revival of the arts, death became, on the contrary, a very frequent subject for painters, who were called upon to represent the various scenes connected with the Crucifixion, the descent from the cross, the entombment. It also found a place in the sculptures on tombs and memorials.

The great destruction of works of art and many of the decorations of our cathedrals after the Reformation, and during the time that puritanism was having its sway, accounts for the paucity of these works in England when compared with their frequency on the Continent.

In modern art death has a great place, and taking, for example, the pictures in the Tate Gallery, I found after a careful inspection that nearly all those that could be included in the subject under consideration there, were representations of death, and, to be very exact, of violent death.

In pictures where death has a place, we have to distinguish its various aspects, and it is interesting to observe whether they have been studied by the artist and been given their due importance. The mistakes some of them make are curious, and occasionally absurd, owing to incongruity.

There should be a difference made between the face of a dying man and that of one who is dead. Of the dying man we have the classical description known as the facies Hippocratica: "A sharp nose, collapsed temples; the ears cold,

contracted, and their lobes turned out; the skin about the forehead being rough, distended and parched; the colour of the whole face being green, black, livid, or lead colour."

This description applies to the face of a person when death is at hand, although it is often misquoted, and in a well-known book on forensic medicine, I have found it included amongst the signs to be looked for when life is extinct. Shakespeare, who is supposed to have known the quotation from Hippocrates, was more correct, and made proper use of some of the words when describing Falstaff's last moments: "For after I saw him fumble with the sheets and smile upon his fingers' ends, I knew there was but one way; for his nose was as sharp as a pen, and he babbled of green fields; his feet were as cold as any stone."

After death the pallor of the skin and the flaccidity of the muscles becomes most noticeable. Sir Charles Bell says: "There may be for a short time the expression of suffering, but this subsides and the features become placid and composed. Therefore it is that the sorrowing friends are withdrawn until Death has had his victory, when the features assume the tranquility of sleep."

Pallor is, of course, more intense after death from hæmorrhage. Great attention was drawn this year at the Guildhall Loan Exhibition to Van Dyck's picture of the "Death of Buckingham." The painter is known to have been at Southampton when the duke was murdered, and probably painted the picture on the spot. The pallor represented was intense, and suggested that the assassin's dagger had wounded a main artery and caused death from internal hæmorrhage.

Immediately after death the muscles become flaccid, and what Bell has called *the gravity of the limbs* causes the body to sink down.

What goes under the designation of "the stiffness of death" often leads the lay mind into errors. It seems as if immobility must be mistaken for stiffness. The real stiffness, or *rigor mortis*, only comes on after an interval of time, varying according to the mode of death, the temperature of the atmosphere and other circumstances.

This *rigor mortis* is wonderfully well represented in Ribera's picture of *The Dead Christ*, which I mentioned when talking of wounds. The body is seen at the moment when it

is most marked, notably in the trunk and the neck. The head and shoulders are being raised from the ground by one of the disciples and the flexure of the body takes place at the hips, not in the spine. This detail and the position of the hands, which are slightly pronated, with the thumbs drawn towards the palms, give a very realistic appearance to the picture.

A common error is to suppose that the stiffness comes on at once. This is sometimes seen on the stage. I remember being much struck by the absurdity of it when seeing one of our well-known actors who was taking the part of Mercutio in "Romeo and Juliet" and who, in the duel scene when he wanted the audience to know he was killed, stiffened all his limbs, and allowed himself to be carried off the stage perfectly rigid, instead of falling down on to the ground as he should have done, with his limbs all relaxed. The mistake is frequently made by painters of battle scenes who represent the soldiers who have just been shot dead lying in stiff attitudes.

A few years back there were to be seen at an exhibition in London some wonderful pictures of battles by Verestchagin, the great Russian military painter, whose loss had to be deplored during the late war, when he went down with the admiral's ship outside Port Arthur. In these I could not help being struck by the difference he had made in the posture of those soldiers who had obviously just been killed and of those who had been lying on the ground since some previous engagement. A picture, full of horror, and realistic in the highest degree, was one described as "Three Days after the Battle."

Another very common error is to represent the veins on the backs of the hands and forearms as still distended with blood. The superficial veins are hardly perceptible after the heart has ceased to beat, when the blood flows into the large internal organs or gravitates to the most dependent portions of the body.

Some Modern Pictures.

At the Tate Gallery, amongst the modern pictures dealing with this subject, one of the most striking is *The Death of Chatterton*, by Mr. Henry Wallis, with whose kind permission I am enabled to show you this photograph. The young poet,

who has just taken poison, is seen lying on a bed under the window through which the grey light of early dawn is coming in, giving a weird appearance to the scene. The position is quite a natural one. The body is turned over on to the side, and the head has rolled off the pillow to the very edge of the bed. The hands are closed, and the right one, which hangs down on the floor, still grasps a handkerchief. Close to it on the floor is seen the empty poison flask. *Rigor mortis* has already commenced and is conspicuous in the neck and hands. I was particularly struck by the forcible rendering of the pallor of the face and neck, with its shadows of a leaden hue and the waxy and transparent look of the skin.

The Death of Amy Robsart, by Yeames, is another picture in which I have admired the very correct rendering of the appearance of the skin after death. The body is lying at the foot of the staircase *like a snowdrift*, to use Walter Scott's words, and the artist has produced a wonderful study in white. The whiteness of the face and neck with the faint grey shadows about the nose and temples has a transparency which gives it quite a different character to the whiteness of the clothing, especially to that of the rich silk gown with gold embroidery. The lips are slightly parted and of a dull purple colour. There are just a few coils of auburn hair close to her shoulder which catch the light from the window and enhance the paleness of her face.

Millais' picture of *Ophelia* calls for a few remarks. A mistake that strikes me is that she has far too healthy a look, with her plump cheeks and rosy lips. I remember that at Bethlem Hospital, Dr. Savage frequently pointed out to the students the patients of what he called "the Ophelia type." They were generally girls with sallow complexion, feeble circulation, who had been refusing their food, and, in consequence, were emaciated.

A remark often made about the picture is that she is floating too high on the water. Millais here wanted to give the importance to the lines:—

> "Her clothes spread wide,
> And mermaid-like, awhile they bore her up."

He no doubt studied this point carefully, and to his cost, for it is known that his model, who used to lie in a tank of water, nearly died of pneumonia after getting a chill one cold day when the temperature of the water was allowed to get too low.

If I were asked which is the most popular picture to-day in all our galleries, I should at once say it is *The Doctor* by Sir Luke Fildes, at the Tate Gallery. I think there is scarcely any other picture which touches, with such ability of execution, the emotional chord of old and young, educated and uneducated.

I have thought that it would be interesting to take a record with a phonograph of the remarks which it calls forth from visitors to the gallery. The most frequent of all is: "How sad!" The child's complaint is said to be a puzzle for every new house surgeon who sees the picture hanging in the wards of a hospital, where it so often finds a place. The little which one can see of the child, with its flushed face, well nourished limbs, and extended arm, suggests some acute chest complaint, probably pneumonia.

A Sherlock Holmes might help one to form a diagnosis by pointing out the bowl and spoon on the stool, which have just been used to make a poultice, the soothing effect of which the doctor is now watching.

In this picture morbid details are conspicuous by their absence. The whole interest of the subject, the critical condition of the child, is conveyed to the observer by the distress depicted in the face of the father, by the mother's attitude of despair, and by the kindly look of the doctor, which is expressive of deep concern for the recovery of his little patient.

Conclusion.

The conclusion which we are led to by contemplating these pictures is that any place which medicine can have in art must be but a subordinate one, and that it is often the better taste for the artist to hide some morbid detail. It is not the proper purpose of the sculptor or painter to produce mere imitations, and he must not be led away by the idea that he need only copy Nature. His work, to be well composed, should be a whole in which each part, in its proper place, merely contributes its share towards the principal effect, the main idea which is to strike the beholder. The true artist has to judge which details he had best make use of, just as he has to choose that particular moment of a scene which is the most interesting, the most pathetic, or the most stirring.

When he has to deal with a subject with a morbid side, it is

essential for him to cultivate some of that *reserve* so noticeable in Greek art. He should "use all gently . . . . he must acquire and beget a temperance that may give it smoothness." He must use his art not only to hide art but to hide unpleasant details. What we require of him is to stir up our finer feelings and to rouse our admiration; for it is the very joy of our heart to admire where we can, and nothing so lifts us "from all our mean imprisonments, were it but for moments, as true admiration."

> "We live by admiration, hope and love.
> And, even as these are well and widely fixed,
> In dignity of being we ascend."

THE DIAGNOSIS OF EARLY TUBAL PREGNANCY.

By FREDERICK J. MCCANN, M.D.Edin., F.R.C.S.Eng., M.R.C.P.Lond.

THIS subject is best considered under two heads: (1) The diagnosis of tubal pregnancy before any disturbance to the growth of the ovum has occurred; (2) the diagnosis of tubal pregnancy after such disturbance or after rupture.

The discovery of an undisturbed tubal pregnancy may be described as a happy accident and may occur where a patient, under the impression that she was pregnant, has presented herself for examination, or where an examination has been made for some other reason.

History.—The patient will not be beyond the child-bearing period and will be capable of becoming pregnant. There may be a history of amenorrhœa, one or two periods having been missed, or no irregularity has been noted. Irregular losses of blood may take the place of the amenorrhœa, but this is probably indicative of hæmorrhage into and around the ovum. The changes in the breasts associated with early pregnancy should be sought for, and if found are valuable confirmatory evidence. Enlargement, hardening and pigmentation may, however, be entirely absent.

Bimanual examination will reveal the presence of a slightly enlarged uterus with a swelling situated on one or other side

of that organ in the position of the corresponding Fallopian tube. The thin tube wall does not increase the volume of the tumour, so that the gestation sac corresponds in size to that of the contained ovum. This tubal swelling is globular or spindle-shaped; and the portion of the tube unchanged may be felt close to the uterus. This will depend on the position of the gestation in the tube. It feels soft and doughy, no proper tension nor true fluctuation. It is not elastic in consistence, but is yielding, thus differing from an ovarian tumour and a hydrosalpinx. It is freely movable unless it has become adherent. In rarer cases the pregnancy develops between the layers of the broad ligament, and hence it is more difficult to define its connection with the tube, moreover, its shape is more rounded and its wall thicker, owing to the participation of the broad ligament in the hypertrophy associated with pregnancy.

Medical assistance is usually sought in cases where some disturbance has occurred to the growth of the pregnancy, causing sudden collapse, sudden severe or repeated pain in the lower abdomen, free vaginal hæmorrhage, transient peritonitis, or pressure symptoms.

Let us examine in detail the accidents which may befall the gravid tube and the signs and symptoms developing as a consequence.

(i.) Free hæmorrhage into the abdominal cavity. The appearance presented by a patient into whose peritoneal cavity free hæmorrhage has occurred is one of profound anæmia. The pulse is rapid, small, ill-filled, and frequently absent in the extremities. The pulse increases in frequency as the hæmorrhage proceeds, after a time becoming perceptibly weaker. A preliminary stage of retardation of the pulse rate is described by physiologists, but this is not often observed at the bedside. While counting the pulse it may be felt to flutter or become imperceptible, especially if the patient be about to vomit. The temperature is subnormal.

Vomiting, hiccough, and severe abdominal pains, direct attention to the abdominal cavity. The belly walls are distended and very sensitive to touch, more especially in the hypogastric and iliac regions. If the quantity of blood be large the percussion note is dull and there is increased resistance. To locate the source of the bleeding is still more difficult, but

dulness,[1] increased resistance and marked tenderness in one or other iliac region suggest an origin from the internal genital organs.

An internal examination, which should always be made, reveals a soft yielding resistance in Douglas' pouch with slight pushing forwards, anteposition of the uterus, or an increased resistance in the neighbourhood of the adnexa. Such an examination conducted whilst the patient is collapsed and the abdomen full of blood cannot be expected to afford detailed information as to the condition of the adnexa, or the changes in them may be so insignificant that they are not palpable, *e.g.*, where the ovum has been expelled and the tube collapsed. The diagnosis therefore rests on probability, and we must look to the menstrual history (if obtainable) for guidance. In many cases a history of definite menstrual cessation is obtainable, but there is increased difficulty where the menses have been irregular for some time preceding the accident, and where it has happened in the interval between the monthly periods. *Nevertheless, tubal pregnancy is the most probable cause of great internal bleeding in the female abdomen.* The shedding of a decidual membrane usually occurs some days after the catastrophe, so that it is not helpful as a diagnostic sign at the time.

Differential Diagnosis. — Internal hæmorrhage from tubal pregnancy may be confounded with "perforation peritonitis," due to ruptured viscera or perforating ulcer. The onset is acute, there is severe pain, and fluid may be detected in the abdomen and Douglas' pouch, but the general appearance of the patient suggests a very acute peritonitis. She is not so anæmic but has a tendency to lividity. In acute peritonitis from a perforating ulcer there is the typical facies, general tenderness and rigidity of the abdominal walls, with absence of movement. The pulse is rapid, usually over 130, and there is marked collapse. You may listen with the stethoscope for the sound of the peristaltic movements. If no sound be heard after five minutes, the intestines are probably paralysed (Greig-Smith).

[1] The presence of blood in the abdomen is said to be productive of dulness on percussing the flanks, very slowly changing with changes of position. I do not consider this sign of sufficient importance to warrant the risk incurred by moving the patient.

The condition of the pulse is most important. In severe intraperitoneal hæmorrhage the radial pulse may not be perceptible. If felt, it is of a character which betokens severe blood loss, whereas in perforation peritonitis it is generally perceptible, but is small and thready, indicating acute peritonitis.

The following case illustrates the effect of great internal bleeding :—

A patient, aged 29, married four years, sterile, was suddenly seized while at stool with violent abdominal pain and sickness. When seen she was extremely blanched, her radial pulse just perceptible, dyspnœa marked. She vomited once in my presence. Her abdomen was slightly distended and very tender on palpation. There was dulness on light percussion in the hypogastric and iliac regions.

On bimanual examination (which was conducted with great gentleness) the pouch of Douglas was found to be filled with something which gave to the finger the sensation as if pressure were being made on a feather pillow. *The examination caused the patient to feel very faint.*

A ruptured tubal pregnancy was diagnosed. The diagnosis was confirmed by operation, the abdomen being full of fluid and clotted blood. Previous to this attack the patient had missed her period for one week.

(ii.) Hæmorrhage into and around the gestation sac, or into the neighbourhood of the Fallopian tube, or into Douglas' pouch, is more frequent than great internal hæmorrhage. Through clotting of the effused blood definite tumours are formed. The physical signs vary according to the situation in which the blood has collected.

(*a*) *Bleeding into the Tube.*—When this occurs the affected Fallopian tube is more easily palpable. The tube is enlarged and its outline and sinuosity more defined. The uterine end may often be felt of normal thickness, in contra-distinction to the enlarged ampullary portion. The consistence is firm and hard and on pressure it is almost painless. Moreover, in the absence of adhesions its mobility is retained.

Case illustrating Intratubal Bleeding.

A woman, aged 35, who had had one child born four years previously, having missed her "period" for six weeks, had severe abdominal pain and bleeding from the vagina. A piece

of flesh, described as the size of the palm of her hand, was also passed. Previous to this attack her breasts had been painful and she had had morning vomiting. The pain experienced was so severe that she fainted on three occasions. It was situated chiefly in the left iliac region. An elongated, movable swelling was palpable to the left of the uterus, the latter organ being slightly enlarged. The breasts were stated to have become smaller and the pain in them subsided. She was kept under observation, and the tubal swelling was noticed to have diminished in size. However, at a later date, owing to continuance of the pain, of the vaginal hæmorrhage and the increase in size of the swelling, it was decided to operate, and a tubal mole was removed.

(*b*) More frequently there is a combination of intra- and extra-tubal bleeding with the formation of an extra-tubal tumour in addition to the enlarged Fallopian tube. If the blood collects in Douglas' pouch a retro-uterine hæmatocele is formed. Such a blood tumour may fill the whole of Douglas' pouch, pushing downwards the posterior vaginal vault, displacing the uterus forwards, and if large enough even elevating that organ. Indeed, where the effused blood is excessive it may mount above the uterus and come in contact with the anterior abdominal wall. The rectum is pressed to the left side of the pelvis posteriorly and may be narrowed, but never in intraperitoneal hæmatocele surrounded as by a ring.

The roof of the hæmatocele is formed by coils of intestine glued together, and has in a fresh hæmatocele an irregular contour. In older effusions it becomes sharp and defined.

The blood is in close contact with the neighbouring viscera, more especially the posterior wall of the uterus. If the hæmatocele be small it may not reach the side wall of the pelvis, so that the palpating finger can detect a definite interval. Such a tumour is movable with the uterus and hence may lead to diagnostic errors.

An important factor in the discernment of an intraperitoneal hæmatocele is the consistence. Fresh hæmatoceles are mostly soft and flaccid, after some hours becoming more elastic and fluctuating. Soon the coagulated blood is of a doughy consistence, in which fluid and more resistant portions are detectable. By shrinking of the clot and absorption of the fluid portion of the blood the characteristic feel of a hæmatocele gradually becomes lost.

This transition in a short period from a cyst-like swelling to one of hard consistence is regarded as being pathognomonic; but exceptionally the blood remains fluid for a lengthened period and thus resembles the consistence of a cystic tumour.

The hæmatocele may be situated laterally in the pelvis, depressing the floor of Douglas' pouch on that side and pushing the uterus towards the opposite side.

Intraperitoneal hæmatocele in women is almost always caused by tubal pregnancy, sometimes by rupture of the tube, and sometimes by bleeding from the fimbriated end without rupture. The latter is the more common and the bleeding is usually set up by the presence of a hæmorrhagic mole within the tube. Cases of ruptured tubal pregnancy only sometimes give rise to a definite hæmatocele.

In fully half the cases the hæmorrhage is diffuse, continuing until stopped by operation or death. In the remaining cases the hæmatocele so formed is very unstable, subject to sudden and violent alterations from fresh bleeding.

Cullingworth states that "of twenty-five cases of pelvic hæmatocele, in which an opportunity occurred of verifying by actual inspection the source of the bleeding, twenty-three were instances of hæmorrhage from the open abdominal ostium of a pregnant Fallopian tube, and only one was due to rupture."

Differential Diagnosis. — Retrouterine hæmatocele may be confounded with tumours, cystic or containing fluid, lying posterior to the uterus, to wit, ovarian and tubal swellings and serous and purulent peritoneal exudations.

But of greater practical importance is the resemblance to retroflexion of the gravid uterus not only in physical examination but in the signs and symptoms—amenorrhœa, hæmorrhage and spasmodic pains. Attempts at reposition, under the impression that the condition was a gravid retroflexed uterus, have resulted in death owing to the recurrence of hæmorrhage.

Theoretically, the distinction appears easy, because you should be able to palpate the uterus in its entirety lying in front of the retrouterine tumour, whereas in gravid retroflexion the cervix is palpated and found to be continuous with the uterine body, which is displaced backwards. But difficulty arises either where the hæmatocele is closely connected with the uterus or where the cervix is mistaken for the entire uterus; the difficulty being increased when the abdominal walls are fat.

A certain amount of guidance may be obtained by noting the direction in which the cervix is pointing, but on this too much reliance cannot be placed.

The gravid uterus is rounded, exhibiting a certain amount of mobility. Its consistence is similar in different portions, and the changes noted as occurring in a hæmotocele are not detected. A hæmotocele, especially of fresh formation, has an irregular contour, and owing to irregular filling of Douglas' pouch, or adhesion to the pelvic wall, its boundaries are irregular. A rectal examination affords great assistance.

The history and symptoms will here aid the diagnosis, for in the absence of symptoms of bleeding and repeated cramp-like pains, following on amenorrhœa, together with the absence of local signs of effused blood, the existence of a hæmatocele may be excluded.

A good example of retro-uterine hæmatocele, extending upwards into the abdominal cavity, is furnished by the following case:—

A woman, aged 30, who had been married for four years. Had one child a year after marriage. Eight weeks before she was seen by me she was attacked by severe abdominal pains. At this time she was supposed to be six weeks' pregnant, and fourteen days later it was alleged that she had a "miscarriage." Since this "miscarriage" she had been losing blood daily from the vagina, causing her to look very ill and bloodless.

On examination, *per hypogastrium*, a boggy swelling was felt extending upwards on the right side to a point midway between the level of the umbilicus and the symphysis pubis. Bimanually, this swelling was found to be continuous with another swelling of like consistence, which filled Douglas' pouch. The uterus was enlarged and displaced forwards and to the left the cervix was softened. The vaginal discharge was dark in colour. The swelling was found at the operation to be a large hæmatocele, encapsuled. It should be added that there had been considerable elevation of temperature during the course of this patient's illness.

In all cases which survive the first few hours and in which the bleeding is temporarily checked there is difficulty in the passage of flatus and alvine evacuations, and also considerable abdominal pain, for the signs of peritonitis become superadded to those of internal hæmorrhage.

Peritubal Hæmatocele.

More frequently the blood from out the gravid tube forms a tumour in its vicinity, especially at the abdominal end. This is termed a peritubal hæmatocele. Its position varies with the position of the abdominal ostium; usually it lies posteriorly and laterally behind the uterus. Not infrequently it mounts up as high as the upper limit of the false pelvis.

Where the uterus is retroverted and the ampullary end of tube occupies the anterior half of the pelvis a blood tumour is developed in front of the uterus.

The size of the tumour depends on the amount of blood effused. The shape is in the beginning irregular, but as the outer part of the clot becomes organised the tumour becomes round like an ovarian tumour. It is also at first immovable, being intimately connected with the uterus, rectum and pelvic wall. Later the mobility increases, especially if its connection with the pelvic wall has disappeared, when it moves with the uterus and tube.

In the beginning the consistence is soft and doughy; later it is firm, but never becomes specially hard. This rapid alteration in consistence may be frequently observed. Occasionally the blood remains fluid for a long time, and in such circumstances an old hæmatocele whose outermost layers are organised, and whose interior is fluid blood, leads to the development of a tumour very like an ovarian cyst.

A combination of intratubal bleeding and peritubal bleeding is not uncommon, the dilated hard. tortuous tube being palpable, as well as a soft tumour with the characters already noted lying posteriorly and laterally, in which the tube is immersed. That the hæmorrhage from out the tube has occurred at intervals may be proved by the appearance of the effused blood, when the different ages of the clot can be demonstrated.

This combination of intratubal and peritubal bleeding may be illustrated by the following example: A woman, aged 37, who had given birth to four children the last two years previously, was seized with acute pain in the right inguinal region and thigh on November 13, 1897. The thigh was also swollen. Her menstruation, previously regular, had ceased for three months. On November 17 she had a slight vaginal discharge of bright red blood. The pain

continued to increase, being referred to different portions of the abdomen, but chiefly the right iliac and umbilical regions.

The temperature varied from 99° F. to 101° F. Pulse 100 to 120. The bowels were constipated, and micturition was both difficult and painful.

When I saw her on December 6, 1897, she was very blanched; her skin cold and clammy. She complained of intense pain in the right side of the abdomen. Her temperature was 101° F. The abdomen was slightly distended and very tender on palpation. There was dulness on percussion, extending upwards from the right iliac region to the level of the umbilicus. Bimanual examination was very difficult owing to pain. An examination under anæsthesia, before operation, revealed an elastic elongated swelling occupying the right posterior quarter of the pelvis, and a rounded, boggy swelling which appeared to move with the uterus, and into which the former tumour appeared to extend. The latter swelling reached above the brim of the pelvis on the right side.

Operation.—Abdominal section: removal of dilated right Fallopian tube filled with blood clot enclosing a central cavity. A large mass of clot was found surrounding the expanded ampullary end of tube. About a pint of blood clot was also removed from the abdominal cavity. She made a good recovery.

A hæmatoma in the broad ligament is less common because most tubal pregnancies end in tubal abortion. Such a swelling exhibits distinct vaulting on its surface, owing to the upward limitation by the folds of the broad ligament, whilst there is concave vaulting of the lower surface of the mass, which has therefore been compared to an irregularly shaped jelly-fish. The edges of the mass fade downwards on the walls of the pelvis. The effused blood dissecting round the rectum in the cellular tissue outside the peritoneum causes blocking of the rectal tube by means of a ring-like constriction, which serves to distinguish an extraperitoneal from an intraperitoneal blood effusion.

The discovery of a hæmatocele should make one at once suspect tubal pregnancy, because the other causes of intraperitoneal hæmatocele are so very rare; and when the dilated

tube can be felt running into the blood effusion the diagnosis is still more certain. In uncertain cases we must look for the presence of other changes in the genital organs associated with early pregnancy, and examine the condition of the breasts. Both, however, may give negative results.

The passage of a decidual membrane plays an important *rôle* in the diagnosis. Under the influence of pregnancy the endometrium undergoes a change resulting in the formation of a decidual membrane which in about two-thirds of all cases is expelled. This expulsion is usually accompanied by pains resembling labour pains, the decidua being either in two pieces or membranes corresponding to the two walls, or in smaller portions.

Unfortunately the decidual membrane is not generally seen by the medical attendant, who has to rely on the statements of his patients concerning its character. The usual description given by the patient is that a piece of flesh has been passed. The piece of flesh may be the decidual membrane associated with tubal pregnancy, or an early uterine pregnancy, or a dysmenorrhœal membrane.

If no ovum be discovered in either half of the membrane, or no local indication of its existence, a uterine pregnancy is improbable. The decidua menstrualis is much thinner and is usually voided in pieces every month. The decidua associated with tubal pregnancy is the thickest. Frequently, however, the microscope is required in order to complete the diagnosis.

The passage of a decidua does not occur where a tubal pregnancy goes on developing undisturbed. It follows either the death of the ovum, the rupture of the tube, tubal abortion, or intratubal bleeding. But every rupture or every hæmorrhage does not result in the death of the fœtus. The passage of a decidua indicates that some disturbance to the growth of the ovum has occurred, but is not a certain sign of death of the ovum. The decidua is passed usually several hours or even days after such disturbance and its passage is accompanied by bleeding which lasts some time.

The history furnished by the patient must be carefully analysed. Amenorrhœa is usually present; in a limited number of cases it is entirely absent. The menstrual period has usually been delayed some days when acute symptoms

supervene. Such symptoms may occur on the day when the expected period commences or even before its commencement. Should the period recur at the regular time the amount of blood loss is appreciably diminished. As soon as any disturbance to the growth of the ovum has occurred the uterine hæmorrhage obscures the menstrual periods and an indefinite history is obtained. All amenorrhœa, even only lasting a few days, should raise a suspicion of pregnancy.

The history of a short period of amenorrhœa followed by uterine hæmorrhage, and maybe the passage of a decidual membrane (piece of flesh), is suggestive of a uterine abortion, but it is also suggestive of a tubal pregnancy, and for the purpose of differentiation a most careful bimanual examination should be made in order to exclude the presence of any peri-uterine swelling. It is easy to imagine the dire results which might follow the application of a curette to the uterus under the impression that retained fœtal products existed *in utero*, when the case was one of tubal pregnancy.

The symptoms associated with any disturbance to the growing ovum, be it tubal abortion, rupture of the gestation sac, or death of the ovum, are characterised by their sudden onset—violent pains in the lower abdomen coming on without a cause, or after straining, dancing, or a bimanual examination. The patient describes the pain as being cutting or stabbing in character, situated in the lower abdomen and rectum, accompanied by faintness, pallor, giddiness and vomiting. The duration of the pains is short, but they recur after a shorter or longer period, so that several attacks are experienced until they cease. The cause of the pain is probably the effusion of blood into the tube and into the peritoneal cavity. External hæmorrhage is a sign of importance, as indicating some disturbance. It may last several months and be of considerable amount and often mixed with mucus, and accompanies the attacks of pain, or sometimes only one attack. In the early days of the bleeding the decidua is expelled.

To be able to determine whether the ovum is dead or alive is of importance in prognosis and treatment. As long as no disturbance to the growth of the ovum has occurred and the tubal swelling presents the characters already enumerated we may conclude that the ovum is living. It is more

difficult when some disturbance has occurred to determine whether it has resulted in the death of the ovum or not.

Great internal bleeding and large retro-uterine hæmatoceles indicate death of the ovum. An increase in size of the hæmatocele does not indicate a living ovum, but merely fresh hæmorrhage.

If the uterus be soft and enlarged, the portio vaginalis and the vagina blue and more patulous, a living ovum is probable but not certain. Pulsation of the vaginal arteries occurs where the ova are both living and dead. The cessation of the pulsation is in favour of death of the ovum. Marked hæmorrhage into the tube also indicates death of the ovum. The expulsion of a decidua is not a sure sign of fœtal death. A certain importance is attachable to mammary signs, but these are so frequently absent that their aid is not obtainable. Where doubt exists reliance must be placed on observing the increase or diminution in size of the gestation sac. It must be remembered that cramp-like pains and fainting may occur where the ovum is still living. Long-continued uterine bleeding usually indicates death of the ovum, but it is not infrequently absent where the ovum has ceased to grow.

Differential Diagnosis.—In considering the differential diagnosis, reference has already been made to the necessity for distinguishing a simple abortion from hæmorrhage complicating a tubal pregnancy. But the association of an intra-uterine pregnancy with a pelvic tumour may lead to error in diagnosis. Where doubt exists, it is well, in the absence of urgent symptoms, to wait, noting any alteration in the size of the uterus. There is, however, a closer resemblance, not only in the history, but also in the physical signs between tubal pregnancy and pyosalpinx. A short description of a case will best explain the similarity :—

A woman, aged 25, presented herself for examination complaining of loss of blood from the vagina which had continued for one month, and was stated to be dark in colour.

Her menstrual periods had been irregular, twenty-one to twenty-eight days type, lasting four to five days with slight blood loss. The periods ceased for two months and she had, on April 13, 1903, what she believed to be a miscarriage. After this she remained five days in bed, but continued losing blood for fourteen days, She then had two normal periods,

the last being followed fourteen days later by the vaginal bleeding for which she ultimately sought advice. Since the miscarriage she had had hypogastric pain and backache, exacerbated at intervals and so severe on one occasion as to cause syncope.

Bimanual examinination detected an elongated elastic swelling, probably tubal, occupying the right side of the pelvis posteriorly. On the left side the tube was also enlarged.

At the operation the swelling on the right side was found to be a pyosalpinx, and on the left side an inflamed tube.

The close similarity in the history is well shown in this case. If, however, a history of repeated attacks of pelvic peritonitis, or long-continued ill-health, be obtainable, these are in favour of pyosalpinx. Both tubes are usually affected, but one is, as a rule, much larger than the other.

Attacks of abdominal pain, collapse and vomiting may complicate pyosalpinx, either from leakage of the pus through the abdominal ostium, or actual perforation of the tubal wall.

GLIOMA OF THE RETINA.

By Percy Dunn, F.R.C.S.
Ophthalmic Surgeon to the West London Hospital.

The notes of the following case will fittingly form the text for this short communication:—

Alice A., aged 13 months, was admitted under my care on May 14, 1906. The patient is a pretty, healthy-looking, well-nourished child. In September last she was taken to the Great Ormond Street Hospital in consequence of vomiting her food, where she was under treatment for four months as an out-patient. From birth she has been fed with cow's milk and barley water. Eight months ago the parents first noticed a "queer" appearance in the pupil of the right eye. The family history is negative so far as cancer and diabetes are concerned, but the child's father has been for some months suffering from pulmonary tuberculosis and is now dying. The patient is the first and only child. The mother has had no miscarriages.

On examination of the right eye, there is no injection of the conjunctival or ciliary vessels; the cornea is natural; the anterior chamber normal; the iris shows no change of colour; the pupil is regular and partially dilated, measuring about 6 mm., but contracts slowly to light. The lens is clear. Deep in the vitreous can be seen a bright yellowish appearance, mainly on

the temporal side, suggestive of a gliomatous growth; the surface of this is irregular and nodular, and passing over it can be plainly defined some retinal vessels. Apparently the growth is still posterior to the equator of the globe. The tension, if anything, is slightly raised. No history is obtainable of the eye ever having been inflamed. The left eye is quite natural.

On May 28 the right eye was enucleated under chloroform, care being taken to divide the optic nerve as far back as possible. The child made a good recovery, and was discharged on June 9 to attend as an out-patient.

On microscopical examination the growth was found to be a small round-celled sarcoma, thus confirming the diagnosis.

There is a pathetic, as well as a tragical, side to the cases of glioma in children—pathetic, because of the incidence of so terrible a disease at the very threshold of life; tragical, because of the inevitable mutilation demanded, with the almost eventual certainty of failure to avert a fatal result.

Apart from, and beyond, however, these considerations, glioma as a form of malignant disease possesses many points of interest. There is first the frequency of its incidence. In a series of statistics it has been shown that among approximately 500,000 patients who attended twenty-two of the largest eye cliniques of the world, 203 cases of glioma were met with; that is to say, based upon these figures, glioma may be expected to occur once among 2,500 cases of diseases of the eye generally. Again, it is the only form of neoplasm of the retina, as Fuchs has pointed out, its occurrence being limited to early childhood. Furthermore, it is the only congenital variety of malignant disease. Many cases have been recorded in which it has developed during intra-uterine life, the infants in question having been born with one or even both eyes in a gliomatous condition. Surely the fact that this is the case must sound the knell of the parasitic theory of the genesis of cancer, even if further proof were still wanting to dispose of so antiquated a belief. Sophistry, based upon imperfect deduction, is the only link which in the present day remains to the chain of reasoning of those who maintain that cancer is a parasitic disease.

Statistics, furthermore, have indicated the marked applicability of the rule of the so-called "three year limit" to cases of glioma. Given a case of glioma, confined to the retina, in which no invasion of the optic nerve has ensued, and a radical cure after enucleation may be anticipated,

Wintersteimer goes further; he is of the opinion that if one year, or at the most two years, pass without any local recurrence, the case is cured. But the nature of glioma is such that at a varying subsequent period to enucleation of one eye, the disease may attack, quite independently, the remaining eye, and death may ensue from recurrence in this situation. On the other hand, cases have been recorded in which double enucleation has been performed and the patients have remained permanently free from the disease. One observer has pointed out that the percentage of involvement of both eyes is very large; in eighty-seven cases it was found to be present sixteen times at birth, that is, 18·4 per cent.

Another point of interest has reference to the occurence of glioma in families. Just as cases of congenital cataract are met with among some of the members of one family, so it is a fact that glioma may be similarly prevalent. For example, Fuchs records a noteworthy case of two children out of three in one family dying from the disease. This might seem to indicate that the disease was hereditary in origin, but to this matter I will refer later on.

A word as to the diagnosis of cases of glioma. The only disease with which it can be confounded is that which is fancifully described as "pseudo-glioma." The yellowish appearance of the fundus in the latter case resembles that present in the true form of the disease. There is, however, no difficulty in distinguishing between the two. In pseudo-glioma a history is always obtainable of the affected eye having been inflamed, and the surgeon, on examination, finds the pupil irregular and fixed by posterior synechiæ showing iritis, while in addition there is invariably much reduction of the intraocular tension, neither of which conditions are present in cases of glioma.

No one can approach in these days the subject of the etiology and treatment of cancer without carefully considering the very suggestive views thereon propounded by Dr. John A. Shaw-Mackenzie. The theory of the parasitic origin of the disease being now practically dead, it is merely a waste of time to discuss that aspect of the question Furthermore, the old time conviction that cancer is a disease of degeneracy must also be regarded as now falling far short of the truth; indeed, it is apparent that much of what we have been

accustomed hitherto to consider as " facts " about cancer will now have to be swept away, metaphorically, into the lumber-room of antiquated and mistaken conjectures. The trend of modern cancer investigation seems infallibly to point to the disease being primarily one of some nutritional defect of congenital origin. This may be manifested very early, as, for example, during intra-uterine life—a fact as proved by those cases of malignant disease, glioma, met with in infants at birth. The old observers, too, were mostly of the opinion that cancer was hereditary, a view, however, which failed to appeal generally to modern pathologists. On the other hand, we should now judge that the old observers were right, in the sense, not of the direct transmission of the disease, but of the inheritance of that nutritional defect upon which the disease depends. How fully this may be assumed to be the case is shown, again, by the occurrence of glioma in several members of the same family. But it may be asked, " What is meant by nutritional defect ? " Turn to the life-history of a cell. In the first place, the growth and activity of a cell depend upon the nutrition it receives. Speaking generally, what is true in this regard of the tissues generally is true of the cell individually. A lowered nutrition is followed by diminution of vitality; on the other hand, a high degree of nutrition is equivalent to increased vitality and over-production, and these are facts which have a close bearing upon the etiology of malignant growths. Investigation has shown that the substance supplied as nutriment to cells is glycogen; all embryonic tissues exhibit an excess of glycogen, and the interesting and most important fact has been further ascertained that an excess of glycogen is present in malignant growths. In short, glycogen is found in abundance wherever active growth is in progress, as, for example, in the tissues of the fœtus. Surely from this it is natural to infer that there must be a close connection between the excess of glycogen in rapidly growing malignant growths and rapidly developing embryonic tissues. The inference is that the rapidity of tissue formation depends upon the excess of nutriment supplied to the cells, this being a natural sequence. But the presence of an excess of glycogen in cancerous growths led Dr. Shaw-Mackenzie to inquire (1) as to the cause thereof; (2) as to the means of dealing with it. Both of these problems were solved by the discovery

that, chemically, glycogen was broken up by the proteolytic ferment of the pancreas, known as trypsin. Then the conclusion became possible that in cases of malignant disease the primary cause was defective functional activity of the pancreas—a possible fact which further investigation seemed to emphasise, for enquiry revealed that a history of diabetes was frequently obtainable in families in which cancer was prevalent.

In a few words, the above is an outline of the theory of cancer formation upon which the trypsin treatment is based. What, however, is the true origin of the cancer cell is probably a matter upon which embryologists and pathologists will still continue to express many a controversial opinion. Whether a carcinomatous neoplasm is dependent upon the proliferation of embryonic cells (Cohnheim), or due to the active proliferation of the germinal epithelium (Beatson), or, again, to heterotypical and other mitoses, with reduced number of chromosomes, differing in character from embryonic cells which have the full number of chromosomes (Farmer, Moore and Walker), or, further, to cells of pre-embryonic origin, these being neither embryonic or somatic (Beard), or, lastly, to cells which have assumed properties different from the epithelial or mother cell owing to chemical transformation (Blumenthal) —these are some of the views which show the complexity and difficulty of the solution of this problem. Meanwhile, the laboratory has determined facts the results of which, clinically, have been very encouraging. In brief, whatever the true nature of the cancer cell may be, there is the certainty that the active reproduction is due to the excess of glycogen present in the growth; that the proteolytic ferment, trypsin, breaks up the glycogen; that the effect of this is to deprive the cells of their nutriment, in consequence of which they become atrophic, die, and are absorbed. Is this, then, the solution of the cancer problem? Probably by no means, and yet it may be, possibly is, the fringe of a great truth; just as we know that Lister's first observations upon the antiseptic treatment of wounds, discounted as they were at the time, were the beginning of a system which required many years of patient study and careful investigation before full fruition was ultimately reached.

Just one more point may be suitably mentioned here,

namely, that in reference to the blood count in cases of malignant disease. Dr. Shaw-Mackenzie has found that there is a slight increase in the number of white blood cells in these cases, presumably a defensive effort of Nature to deal with the local over-cell production. He then ascertained that the hypodermic administration of chian turpentine was followed by a marked increased leucocytosis. Thus it would seem, as part of the scheme of this treatment, that the cells of the growth should first be rendered inert by the deprivation of their nutriment, by which they may become more readily amenable to the increased phagocytic action of the white blood cells. The following is a copy of the blood count of a patient suffering from primary carcinoma of the larynx, with cervical enlargement, at present under the care of Dr. Shaw-Mackenzie, to whom I am indebted for the report of the case. The case was deemed to be unsuitable for operative interference by two well-known surgeons. On July 6, 1906, before treatment was commenced, the blood count was as follows:—

Red blood discs...	5,300,000
White ,, ...	7,000
Polymorphonuclears, &c.	66·5
Hæmoglobin	98

July 18, after twelve days' treatment:—

Red blood discs...	5,620,000
White ,, ...	10,000
Polymorphonuclears, &c.	70·0
Hæmoglobin	100

Another interesting feature in this case is that on July 6, when he first came under treatment, the patient was found to have glycosuria. Despite, however, this fact he was ordered 3 to 4 ozs. of brown sugar daily, this being part of the treatment. In the course of a few days the urine was found to be free from sugar and has since remained so. What is the explanation of this? Does it mean that diabetic patients may be allowed a saccharine diet, provided that they are treated with trypsin?

Reports of Proceedings.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY—ORDINARY MEETING—Friday, July 6, 1906, at 5 p.m.

Mr. L. A. BIDWELL, President, in the chair.

The minutes of the last meeting were read and confirmed.

The following gentlemen were unanimously elected members of the Society: Wilfred Stephen Fox, M.A., M.D., B.C. Camb., M.R.C.P., M.R.C.S.Lond., 63, Grosvenor Street, W.; Anthony Kidd, Fleet-Surgeon R.N., L.R.C.P.I. & L.M., L.R.C.S.I., H.M. Dockyard, Pembroke; J. Herbert Sanders, M.D.Brux., L.R.C.P., M.R.C.S.Lond., 1, Palace Gardens Mansions, Bayswater, W.; Percy Montague Smith, M.D. Lond., M.R.C.S., L.R.C.P.Lond., 196, Earl's Court Road, W.; C. J. Toley, M.D.Dublin, 91, Dean Street, Soho, W.; A. Gordon Wilson, M.D.Lond., F.R.C.S.Eng., 1, Philbeach Gardens, Earl's Court, S.W.

ANNUAL GENERAL MEETING—Friday, July 6, 1906, at 5.15 p.m.

The PRESIDENT, Mr. L. A. Bidwell, in the chair.

The minutes of the last Annual General Meeting were read and confirmed.

The Annual Report was read by the SECRETARY, and the financial statement of the Society, together with the Librarian's account, were submitted, and on the motion of Mr. T. G. ALDERTON, seconded by Mr. H. W. CHAMBERS, the Report and statements were unanimously adopted, and were ordered to be printed.

The Officers for the ensuing session, 1906-7, were balloted for, and the gentlemen who were severally recommended by the Council were unanimously elected.

Mr. Lawrance and Mr. Atkins were appointed scrutineers of the ballot.

Mr. F. R. Mallard and Mr. W. C. Musson were appointed Auditors for next session.

Dr. CLIPPINGDALE proposed a vote of thanks to the President, Officers and Auditors. This was seconded by Mr. LAWRANCE and unanimously carried.

The PRESIDENT briefly replied.

Dr. CULVER JAMES proposed and Dr. J. MANSELL MOULLIN seconded a vote of thanks to the Secretaries, and the senior SECRETARY briefly replied.

The Mirror of Practice.

THE ADMINISTRATION OF TRYPSIN IN A CASE OF PRESUMED CARCINOMA OF THE STOMACH, WITH SOME NOTES ON THE TREATMENT OF INOPERABLE CARCINOMA.

By John A. Shaw-Mackenzie, M.D.Lond.

A year ago, on July 28, 1905, I received a letter from a relative of mine as follows: "I am writing to you on behalf of a great friend. He had an operation for cancer about eighteen months ago which seemed very successful, but now all the symptoms have returned, and his surgeon and doctor are of opinion that another operation would not be possible. I have urged him to consult you. It would be a great happiness for all his friends if you could do something for him."

On July 31 the patient came to see me. It appeared that fifteen months previously he had been operated upon for gastric tumour by a distinguished surgeon. He had been ill for about three months, and was suffering acutely at the time of the operation. This gave complete relief, and his general health improved so much that, whereas he weighed 10 st. 2 lbs. before the operation, his weight went up to 14 st. subsequently. He was again losing weight rapidly, and now weighed 12 st. 8 lbs.; his symptoms had returned; fulness and resistance existed in the epigastric region; he was obviously extremely ill, and it was thought that nothing more could be done, except in the way of opiates.

There was no family history of diabetes or cancer in this case, but in other cases it had appeared to me that there was some connection between these diseases, while the clinical fact of cancer and diabetes alternating in different members of the same family had led me to infer that, as is well known in diabetes, so also in cancer, the pancreas might be at fault. Chemical experiments consequently into the solvent action of various ferments, including those of the pancreas upon glycogen, had been undertaken for me by Mr. F. W. Gamble, and led to the discovery that the proteolytic ferment of the pancreas—trypsin—alone, or aided by alkalies or bile salts, broke up glycogen as well as glucose, the former of which is known to be in excess in carcinomatous growths. These facts directly led to the preparation of a solution of trypsin for hypodermic use, as well as to the employment

of preparations of the pancreas by internal administration, and locally.

The relief, moreover, which had already seemed to follow this treatment in several cases in which I had had some opportunity of putting theory into practice led me to suggest the same in the present case. The patient was under the care of a distinguished physician, who gave his consent to a trial of treatment by me, and the administration of pancreatin and of purified ox gall was therefore commenced.

On August 15 he was feeling so much better, and his weight had increased 4 lbs., that he was now anxious to have further treatment by the hypodermic injections of trypsin. At this time, in my absence from town, these were kindly undertaken by my friend, Dr. John Shaw.

October 16: On my return the patient weighed 13 st. 10½ lbs., and he was in the best of spirits and apparently of health. A tumour could still be felt to the right of the umbilicus of the size of a big plum, painless and movable, and very different from the diffused hard mass which previously existed. The result so far in this case seemed so encouraging that I wrote to the distinguished surgeon who had originally operated.

He very kindly sent me the following note: "The gastric tumour for which I operated was so hard and nodular, and the glands were so extensively involved, that it was impossible to remove it. I therefore performed a gastro-enterostomy, which gave very great relief; in fact, the relief was so marked, and the restoration to apparently complete health so good, that I thought it might be possible that the growth may have been dependent on chronic ulcer, and not on cancer. I am very interested to hear that he has again improved, as when I saw him recently I could not help fearing that the original diagnosis must be correct."

November 28: There is no evidence of any tumour, and the patient is apparently perfectly well; weight, 14 st. 2 lbs. It was considered advisable, however, to continue the treatment.

January 17, 1906: The patient continues very well, and all treatment is now given up.

July 5: He came to see me and was apparently perfectly well; weight, 13 st. 9 lbs. He has had at times some abdominal pain, apparently relieved by dieting, but no evidence of growth has been found.

Comments.—The points which seem to me worthy of notice are:—

(1) The great relief and restoration to health following operation.

(2) While microscopic evidence as to the nature of the tumour and glands is absent, clinical opinion of those best qualified to judge was in favour of carcinoma.

(3) While there are many cases after abdominal section of disappearance of growths presumed to be cancer at the time of operation, and even of true carcinoma, there was apparently recurrence in this case fifteen months after operation.

(4) That whatever the true diagnosis in this case, recovery took place under trypsin and ox gall treatment, and apparently due to it.

The treatment in the above and other cases is as follows :—

(1) To add sugar to the diet. Three to four ounces of the best brown sugar, if possible, daily, It is curious how many patients with carcinoma have avoided sugar for one reason or another. It is impossible here to enumerate the grounds upon which my recommendation of sugar is founded, but patients invariably appear to improve under it. Many patients are great salt-eaters, and this should be restricted.

(2) To give pancreatic preparations or trypsin directly by the mouth. The liq. trypsin acidi (Allen and Hanburys), in one or two drachm doses, may be given three times a day in a little water immediately before meals; or the glycerole pancreatin (Armour and Company).

(3) To give injections of trypsin subcutaneously, anywhere, but as near the growth as possible in sound tissue. I usually begin with ℥xv. of a·2 per cent. strength, and increase gradually to ℥xxx. every other day. I have not gone beyond a 4 per cent. strength. Details, however, still require to be worked out, and no doubt the correct dosage and proper control of this therapeutic agent will be arrived at. The injections are preceded by ℥x. to ℥xv. of a 3 per cent. eucaine solution, and tablets of the same are convenient, while a small piece of ice applied to the surface previous to insertion of the needle obviates all pain. These hypodermic injections of trypsin (sterile) were originally prepared for me by Mr. F. W. Gamble, and can be obtained of Messrs. Allen and Hanburys.

(4) To give purified ox gall in 5 gr. pills or capsules, t. d. s., increasing the dose up to looseness of the bowels.

Sodium Oleate (Soap) Injections, and Ox Gall Treatment. — I learned the value of purified ox gall from the work and method of treatment of carcinoma of Mr. J. H. Webb (Melbourne). He gives it in conjunction with subcutaneous injections of a o·8 strength of the yellow bar soap in ℥xxx. daily, or up to ℥xl., every three or four days, preceded by eucaine. There are few cases in which I do not use the ox gall, and in which I do not alternate the trypsin injections

with the alkaline soap, or give the soap injections alone in conjunction with the pancreatic preparations and ox gall by the mouth. Mr. Webb appears to have had remarkable success in recurrent breast cases, and independently testified to. Not long ago he sent me notes of a case of scirrhus of the breast in which recurrence occurred six months after removal of the breast. He treated her with soap injections and she recovered, remaining well without recurrence nearly four years after. The case is testified to by the original operator, Dr. Helen Sexton (and the microscopic evidence proved), who considers it is a case which should be reported, and with which I heartily agree. Mr. Webb's theory is that in carcinoma there is some defect in the liver secretion permitting cholesterin to separate, and that bile salts and soap are a solvent of cholesterin. It is not improbable that while some cases of carcinoma may be dependent primarily on the liver, others may be dependent primarily on the pancreas or intestinal glands, that is to say, a cholesterinic type in some cases and a glycogenic in others.

Secretin; Erepsin.—For some time now I have been using preparations of the intestinal glands alternately or alone with the pancreatic preparation. The "Elixir Duodenalis" (Allen and Hanburys) is a preparation of active secretin, and given with the object of aiding the secretory activity of the pancreas. The "Elixir Glandulæ Co." (Allen and Hanburys) is a preparation of the active ferments, enterokinase and erepsin. The dosage is 2 to 4 teaspoonfuls of either, three times a day. The important researches of Dr. H. M. Vernon demonstrate the universal presence of erepsin in animal tissues, and its varying amount under different conditions of age and disease. It is not improbable that this ferment is an important factor, if not the most important, in the defensive processes of the tissues in bacterial disease, as also in carcinoma. While it is too early to judge of its therapeutic value, my impression is that its administration is attended with distinct advantage. The natural and comparative immunity of the duodenum and small intestine from cancer, the facts that cancer of the stomach stops abruptly at the pylorus, and that cancer of the large intestine and rectum for the most part increases in frequency the further the distance from the duodenum, would appear to support the treatment of inoperable cancer by the alkaline proteolytic and glycolitic ferments of the intestinal glands, or pancreas and the bile salts. In a considerable number of cases in which the internal administration of these preparations have been recommended, unequivocal improvement in general nutrition, appetite and weight, with relief of pain, have been

noted, or independently reported to me. I have a case at the present time whose general condition is so far excellent. He has been under treatment since January last. In September, 1905, abdominal section had been performed for rectal carcinoma, but found to be inoperable from dissemination of the disease.

Chian Turpentine.—Not long ago, in a leading article on "Cancer Cures," it was stated that this drug had "an ephemeral reputation some twenty-five years ago . . . but it is wholly disused now." I venture to disagree. I am not now thinking of failures which nevertheless might be put down to imperfect method of administration of the drug. I refer to the method of its hypodermic administration introduced by Colonel T. Ligertwood, C.B., M.D., and myself two years ago. So far, independent blood count made for me shows a marked leucocytosis in cases of carcinoma, while after injections of chian turpentine it is found to be still further increased. The last report of the Imperial Cancer Research Fund shows that in cases of spontaneous cure in mice, this was associated with leucocytosis. It seems to me, therefore, that this drug is indicated. Moreover, if, on the one hand, we have in trypsin, erepsin, or alkaline soap, something which acts on the cancer cell, we have in chian turpentine something which produces leucocytosis and removes the products of degeneration. Alone, either may be ineffectual, but combined, better results may be anticipated, and so far as I have gone are being obtained. These injections of chian turpentine were originally prepared for me by Messrs. Southall, Barclay and Sons, Birmingham; of 20 per cent. strength in sesame oil. Fifteen up to 60 minims is the dosage, injected into the cellular tissue of the gluteal region, preceded by eucaine.

One of the chief difficulties which I have found is the want of knowledge as to correct dosage and proper control of the tryptic and ereptic treatment.

I have ventured to think the researches of Professor Sir A. Wright on the opsonic index might help me. In this direction perhaps I may mention that in three cases, recently (inoperable larynx, recurrent breast, and rectum), marked leucocytosis and marked improvement are so far taking place under soap or trypsin and chian turpentine injections together with the internal administration of the pancreatic and intestinal preparations. Using these remedies, the opsonic index of the blood to *M. neoformans* has been found to be raised to 1·2, which appears to be equal to the index noted in cases of improvement under treatment by bacterial vaccine.

INVERSION OF THE UTERUS.

By Mansell Moullin, M.B.

E. B., aged 20, was admitted into Baker Ward, April 12. Patient had been married two years, and was confined with her first child three weeks previously, by a midwife. The birth was easy, and she says there was no difficulty with the after-birth. She has remained in bed and has had pain of an aching character in the lower part of the abdomen, but never very severe. The discharge has not ceased since the birth, and she has lost a good deal altogether.

She is a delicate-looking young woman, lies comfortably in bed, and is now free from pain. She is extremely pale, the lips and conjunctiva being very white.

The abdomen moves with respiration, and there is no rigidity. There is, however, considerable tenderness in the lower part, and the uterus cannot be felt.

Per vaginam a rounded fleshy body is felt just inside the vagina, not very hard, and of the consistency of the normal uterus. Bimanually the fundus cannot be made out, but the tenderness of the lower abdomen prevents thorough relaxation.

April 14: Patient was anæsthetised and the mass in the vagina thoroughly inspected. A dimple was present on either side, and in each a probe could be passed for about half an inch. Aveling's sigmoid repositor was introduced, with the largest cup, and gentle pressure applied by four rubber bands continued over the shoulders with tapes. A pad of gauze was placed between the stem and the perinæum, to prevent undue pressure on the latter. She was examined twice again during the evening, but the inverted fundus was still present in the vagina.

April 15, 10.30 a.m.: The cup cannot be felt, but the cervix can be made out all round the stem. As moderate manipulation failed to extract the repositor, the patient was anæsthetised, and with some difficulty the repositor was removed and a uterine douche given. The vagina was plugged and the patient put to bed.

April 16: Patient comfortable. Bimanually the body of the uterus can be felt well up above the pubes. Returned home at the end of a fortnight looking better, but still very anæmic and sallow.

Remarks.—Inversion of the uterus is not of frequent occurrence, but it happens as an accident of labour more frequently than from any other cause. In this case there does not appear to have been at the time any severe symptoms or collapse: the hæmorrhage persisted and was sufficient to drain the patient.

No feeling of relief is experienced by the patient when the uterus is replaced, in fact, she is quite unaware when it goes back.

In cases of recent inversion twenty-four hours generally suffice for reposition. In cases of long standing, two to three years or more, a successful result can generally be obtained. The use of the repositor may have to be discontinued for a time if the patient is unable to bear it, or there is rise of temperature. A second attempt will then be required.

The sigmoid curve of the repositor is not always the suitable one, and should be corrected and adjusted to the curve of the pelvis.

I always use the largest cup, for two reasons: first, the body of the uterus does not slip out of it; and secondly, it exerts a lateral traction and dilating effect upon the vaginal walls and cervix, which are thus drawn over its margin. Only the gentlest pressure is required, little more than is necessary to support the uterus in the vagina. The vulva should be protected to prevent pressure from the stem and a possible sloughing.

Hospital Notes.

By J. F. Halls Dally, M.B., B.C.Cantab.

Two Cases Illustrating the Surgical Complications of Enteric Fever.

Case 1. *A Case of Post-typhoid Venous Thrombosis.*—J. F. S., aged 35, army clerk, was admitted to the West London Hospital on June 19, 1906, under the care of Mr. Keetley, with the history of a severe attack of enteric fever in Krugersdorp, South Africa, in November, 1900. The patient stated that for thirteen weeks he was in bed, and, when sufficiently well to get up again, considerable swelling of the left lower limb supervened. He was unable to bear his weight on this limb on account of pain and weakness. The limb became "half as large again," the swelling extending from the hip to the ankle. In May, 1902, patient was discharged from the Army on the ground that he was medically unfit for active service. Since then, in spite of the persistence of the swelling, he had been fairly comfortable, and able to walk with the aid of a stick, until November, 1905. During this month he had an attack of influenza, when the left lower limb again became stiff and tender, especially in the region of the calf, which looked red and inflamed. For a few days at a time the ankle

also swelled. Subsequently patient had less swelling but more pain.

Past Illnesses.—Slight rheumatism after getting wet in 1894. Malaria in Aden, 1892-3; no attack since the enteric fever.

Family History.—Father died at sea. Mother alive and well. One brother and seven sisters alive and well.

Condition on Admission.—Patient was a healthy-looking man, with brownish hair and beard. His tongue was clean and his appetite good.

There was hard brawny induration over the posterior surface of the left calf, with some swelling of the ankle. The skin showed brownish discoloration. There was only slight pitting on pressure, but the leg was very tender. No definite thrombosis could be felt, but there was great tenderness over the posterior aspect of the knee-joint.

On June 21, Mr. Keetley operated, making three vertical incisions in the posterior aspect of the left calf. A loose packing of iodoform gauze was inserted into each opening and hot boric acid fomentations applied for the next ten days. A splint was then used which had been devised specially for this case, which consisted of a posterior gutter splint for the leg, with rectangular foot-piece made of parallel lengths of lead piping, opening into another lead pipe which ran round the circumference, and having at the upper extremity a tap through which boiling water was poured until the splint was full. This was ascertained by the water running out of another tap placed at the opposite end. When the splint was full both taps were turned off. The splint was lined with flannel, so that by pouring in a fresh supply of hot water into the splint, the flannel was heated and continuous dry heat thus applied. Under this treatment the œdema and brawny induration to a great extent disappeared, and on July 9 the patient was discharged, both lower limbs being the same size on measurement, and the brawniness having subsided. The incisions had by this time healed, and patient had no pain or discomfort.

Since the time that the patient has been discharged he has been kept under observation, and when seen on the last occasion, in the third week in September, 1906, had slight recurrence of the infiltration of the calf muscles and subcutaneous tissue, but was able to get about fairly well.

CASE 2. *A Case of Post-typhoid Multiple Periostitis.*—G. F. C., aged 14, schoolboy, was admitted to the West London Hospital on May 28, under Mr. Keetley.

History of the Present Illness.—Seven weeks prior to admission had a mild attack of enteric fever. During convalescence he began to have severe pain of dull aching

character along the front and outer side of the right thigh, which was slightly swollen. Soon the swelling increased and pain became easier. Hot fomentations were applied and gave great relief.

Family History.—Mother died of consumption, aged 45. Father alive and well.

Condition on Admission.—The patient was in a condition of extreme emaciation, with outlines of all the bony prominences showing plainly through the skin.

Over the posterior aspect of the right great trochanter a small incision 1½ inches in length was present, through which a drainage tube had been passed ten days previously to admission. Through this there was a copious thin, purulent-looking discharge, with slightly sour odour. The whole of the great trochanter was found to be bare, and the surface of the femur below this as far as could be reached, and the pus was found extending round to the anterior surface of the bone. The temperature had been intermittent during the five days before he was sent in, there being an interval of three degrees between the morning and evening temperatures.

An extension of four pounds' weight was applied to the right lower limb, together with two-hourly boracic fomentations.

June 4: Since there was much collection of pus above the great trochanter, this was evacuated through a free incision. Cultivations were made, and revealed the presence of streptococci, but no typhoid bacilli.

The eroded great trochanter then began to project through the incision, and a large blister formed on each heel, from which speedily followed much discharge of pus.

June 8: Mr. Keetley made a longitudinal incision, 7 inches in length, along the outer side of the right femur, starting above at the level of the tip of the great trochanter. All the tissues were divided down to the periosteum, and a copious amount of thick yellow pus evacuated. The periosteum was then freed from the upper end of the femur at a distance of 2 inches from the much eroded upper surface of the great trochanter and the bone sawn through at this level, the upper portion, which we found to be loose, being removed. A sinus on the posterior aspect of the thigh was then laid open, so as to communicate freely with the upper end of the incision, and some soft-looking granulation tissue scraped away. The gaping wound was then packed with iodoform gauze, and brought into slight apposition with one suture. On the following day the patient expressed himself as much relieved by the operation. He became more cheerful and his temperature became lower. The temperature gradually fell to normal

by July 8, and kept at this level for four days, the wound meanwhile looking healthy and granulating rapidly. The emaciation was still so marked that the patient was only saved from having a bad bedsore with extreme difficulty. On July 12 the temperature rose slightly again on account of more discharge of pus from both heels, which could not be got to heal. The patient, nevertheless, was steadily putting on flesh, and his general condition was greatly improved.

On August 3 the left heel was nearly well, but the right heel was still discharging so freely that a curved incision was made, by Mr. Armour, with its convexity upwards over the inner aspect of the os calcis, the bone well scraped with a sharp spoon and all soft and necrotic tissue removed. From this date onwards the patient made slow but uninterrupted progress towards recovery. On September 4 he was allowed to get up, and on September 12 he was discharged, cured, being able to walk for a short distance, but still feeling weak.

Remarks.—Within a brief period after the publication of an article in the *Lancet*[1] by Mr. Keetley, in which the surgical treatment of enteric fever was dealt with at some length, the above two illustrative cases were admitted, under his care, to the West London Hospital. In the course of this article occurs the following passage: "To realise the seriousness of at least the surgical complications and sequelæ of typhoid fever it is necessary to be acquainted with them practically. A patient had multiple typhoid 'abscesses,' or at least foci of softening and pathological change in both tibias. The medulla of the two bones was more or less destroyed. After months of treatment he recovered and returned to his occupation as an actor, only to fracture one of these weakened bones the first time he tried to dance. The term 'typhoid periostitis' conveys but a faint idea of what this poor fellow had to go through. And complications are liable to occur at long periods, even years, after the fever, so that the connection is not always suspected.

"Numbers of officers and men were more or less incapacitated for months, or even years, by post-typhoid phlebitis after the South African War."

Case 1 is a striking example of the truth of the latter paragraph, whilst the earlier portion of the passage quoted bears a marked family likeness to the history and clinical course of Case 2. In the one case a strong vigorous man was incapacitated for active work during a period of over five and a

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[1] "Appendicostomy and Enterostomy in the Treatment of Typhoid Fever," *Lancet*, April 14, 1906.

half years; in the other the incidence and duration of the original disease were as nothing compared to the distressing and prolonged sequelæ.

A Case of Hæmorrhagic Pancreatitis and Fat Necrosis.

A. C. aged 46, a carman, was sent into the West London Hospital under Mr. Keetley at 10.50 p.m. on March 24, 1906, as a suspected case of duodenal ulcer.

History of the Present Illness.—The patient, a very fat man, had felt unwell for three weeks prior to admission, with occasional pain from a quarter of an hour to an hour after food. Occasionally he had nausea, but no sickness, and has passed very dark motions two or three times during the preceding three weeks. At 2 p.m. on March 23, about half an hour after food, he was seized with sudden severe abdominal pain in the region of the navel. Shortly afterwards vomiting occurred, and was repeated a few times, the pain lessening in intensity. The bowels had not been opened for two days previous to admission, and patient had passed no flatus. There had been no hæmatemesis.

Personal History.—Married. Had two children, the younger of whom is 17 years of age. Said that he was abstemious.

Condition on Admission.—The tongue was moist, the temperature 99·8° F.; the pulse 90, its volume being good; the respirations 40 to the minute. Pain over the upper part of the abdomen was complained of. The abdomen moved well on respiration. Fixed tenderness was present chiefly in the epigastrium, which was prominent, and in the right hypochondriac region. Over the whole abdomen the percussion note was resonant, and there were no signs of free fluid within the peritoneal cavity.

On the following day (March 25) patient felt slightly better, the physical signs remaining as before, save that the tongue looked worse. An exploratory operation was decided upon by Mr. Keetley, who opened the abdomen through a median incision 4 inches in length above the umbilicus. Opaque white points were at once noticed on both large and gastro-hepatic omentum and on the parietal peritoneum. No hæmorrhagic free fluid was present, but the head of the pancreas was felt to be thickened and enlarged. The stomach and intestines were examined and the bile-ducts palpated, but nothing abnormal was discovered in these. The liver was rather small, but not cirrhotic; the gall-bladder was healthy. A rubber drainage tube and gauze were inserted so as to project through the upper portion of the wound, and the rest of the incision was then closed.

On March 26 patient had much pain. The wound was

dressed, the tube and gauze being removed, and a small gauze drain put in. The patient vomited some dark material which looked like altered blood. Subsequently patient became worse, the pulse and respiration rate both increasing. Cyanosis set in and vomiting continued, but pain was now absent, and he died at 6.45 a.m. on March 27, 1906. His maximum temperature was 100·8° F. at 2 a.m. on March 25, and his minimum temperature 96° F. during the eight hours preceding death. For many of the above notes I am indebted to Dr. P. R. Parkinson.

Post mortem.—The *post-mortem* examination was performed by Dr. Low at 5 p.m. on March 27, 1906. *Post mortem* rigidity was absent. The body was that of a very fat man, a layer of fat over 1½ inches in thickness being spread over the abdominal muscles. The omentum also was loaded with fat. The whole of the omentum, parts of the parietal peritoneum, and tissues over the posterior abdominal muscles were dotted here and there with little white nodules, varying in size from a pin's head to that of a small bean, somewhat hard in consistence, but showing no breaking down or pus on section. The stomach was full of dark grumous-looking material, which extended into the duodenum and upper part of jejunum. No ulceration or perforation was present here, nor in large intestine. The liver was fatty, and each kidney was small and fatty. A mass could be felt in the pancreas, extending to the left and invading the left suprarenal capsule. On this side there was considerable necrosis and hæmorrhage, and the pancreas was adherent to surrounding tissues. Many smaller detached yellow masses, about the size of an ordinary bean, were lying in the immediate vicinity. The head of the pancreas consisted almost entirely of fat; towards the tail extensive hæmorrhages had infiltrated the fat and necrosed tissue. The surrounding masses were also fatty, areas of fat necrosis being well marked in them. The nodules scattered throughout the abdominal cavity were always associated with fat, the white area for the most part being incorporated in the fat. The bladder was hypertrophied, and there were a few whitish-yellow nodules in the pelvis, also one implicating the right ureter.

Microscopical Examination.—Sections of the pancreas showed hæmorrhage and fat necrosis, and the little nodules from omentum, from neighbourhood of pancreas, and from other areas in the abdominal cavity also exhibited fat necrosis.

Remarks by Mr. C. B. Keetley.—This case shows that before attributing melæna and tenderness over the duodenum to duodenal ulcer, one should bear in mind the possibility of the much rarer condition of acute pancreatitis. In acute

pancreatitis the symptoms are more suggestive of inflammation and blood infection than in duodenal ulcer, in which there is, with intestinal hæmorrhage, a comparative predominance of the symptoms of hæmorrhage. Only a small proportion of cases of acute hæmorrhagic pancreatis recover, with or without operation, and the disease is rarely diagnosed before operation.

Reviews and Notices of Books.

BERKELEY'S HANDBOOK FOR MIDWIVES AND MATERNITY NURSES.[1]

THIS book is intended for those who desire to obtain the Certificate of the Central Midwives' Board, and in writing it, the author states that he has carefully kept in view the rules of that body. In addition to the subjects generally treated in books of this sort, there is a section on house sanitation. There are 38 illustrations.

We can cordially recommend this little work to those for whom it was written.

ELLIOTTS' PUBLIC HEALTH ACTS AND OTHER SANITARY LAWS AND REGULATIONS.[2]

THIS is a compact little volume in which an abstract is given of the Public Health Act, 1875, and of other Acts dealing with public health matters, together with certain Official Regulations, and Model Bye-laws issued by the Local Government Board for the guidance of local authorities. It is easily read, and contains explanatory notes on the various clauses of the Acts and Orders which are a useful addition to the book. A list of the principal legal cases which have been decided under the Public Health Acts, &c., is supplied.

A fair general knowledge of public health legislation can be obtained from it, but it is stated in the preface, that the authors confidently believe that a competent knowledge of the contents of this digest will prove sufficient to satisfy the examiners in sanitary law. In its present form we should doubt this, as although eminently readable, it lacks reference to several Acts such as the Rivers Pollution Prevention Acts, 1876 and 1893, the Isolation Hospitals Act,

[1] "A Handbook for Midwives and Maternity Nurses." By Comyns Berkeley, B.A., M.B., B.C.Camb., M.R.C.P. Illustrated. Pp. 283. Price 5s. London: Cassell and Co., Ltd., 1906.

[2] "The Public Health Acts, and other Sanitary Laws and Regulations." By Martin Elliott, Barrister-at-Law, and Gilbert Elliott, M.R.C.S., L.R.C.P., D.P.H. Pp. xii. + 168. Size, cr. 8vo. Price 5s. net. London: H. K. Lewis, 136, Gower Street, W.C.

1901, &c. Certain well-known sections of Acts in daily use by Executive Officers of Sanitary Authorities might well be referred to; for instance, § 96 of the Public Health Act, 1875, which deals with recurring nuisances.

When passing in review the Public Health Acts Amendment Act, 1890, the authors call attention in their note to a defect in the original Act, which is rectified in the amending Act, but one of the most useful clauses of this latter Act is not referred to, viz., the fact that a Justice can condemn as unsound "any such article" "if satisfied on complaint being made to him that such article is diseased . . . . although the same has not been seized," &c. In other words, the actual article need not be carried before the Justice; a rectification of a defect in the original Act which every Medical Officer of Health appreciates.

When dealing with Slaughter Houses (p. 38) the explanatory note states that "such licences are granted *to the premises* and *not the persons occupying*, and therefore they endure for the benefit of all subsequent owners." It would be well, however, to call attention to the fact that licences, granted after the adoption of the Public Health Acts Amendment Act, can, by § 31, be revoked on conviction for sale of meat unfit for food.

When dealing with the Vaccination Acts the fact that "the clerk of any sanitary authority which shall maintain a hospital for the treatment of small-pox patients shall keep a list of the names, addresses, ages, condition, as to vaccination of all small-pox patients treated in the hospital . . . " is not mentioned, but this is an important administrative provision, realised by those who have to deal with outbreaks of small-pox, and especially so in anti-vaccination districts. No reference is made to the Vaccination Officers, who are most important and responsible executive officers under the Vaccination Order of 1898, and which Officers, by § 5 of the Act of 1871, must be appointed by the Guardians of every Union.

Section 234 of the Customs' Consolidated Act, 1876, is quoted somewhat fully, and certain words are emphasied by being printed in italics. It is unfortunate that the authors have failed to observe that these very words, with the exception of the penalty, £100, were deleted from the Act by the Public Health Act, 1896.

It might be well in a future edition of this work to incorporate in it further reference to official "Orders" issued in connection with the various Acts.

Lucid condensation of Acts of Parliament is a difficult achievement, and although it is admitted that the authors have not been unsuccessful in their attempts, still in special instances this effort at brevity of expression leads them into error. Thus on p. 114, we read that "every port sanitary authority, and every other sanitary authority shall make provision for the reception of patients and persons suffering from cholera, yellow fever, or plague." A reference to the Regulations referred to, will show that after "every other sanitary authority" follow the words "within whose district persons are likely to be landed from ships coming foreign shall . . . ." There is nothing in the Regulations to compel every sanitary authority in the country to make this special hospital provision which the wording of the paragraph referred to would suggest.

Richard Mead, M.D., who in 1720 wrote "A Short Discourse con-

cerning Pestilential Contagion and the Methods to be Used to Prevent It," showed clearly why measures of quarantine could not be relied on to keep exotic disease out of this country. His ideas were in advance of the time in which he lived, and they were not then acceptable to his fellow-countrymen. It was not until 1896 that we repealed our Quarantine Laws. When dealing with the possible importation of plague by means of the shipping, Mead wrote "and if a Ship come from any Place, where the *Plague* raged, at the Time of the Ship's Departure from it, with more than usual Violence, it will be the securest Method to *Burn* all the *Goods*, and even the *Ship*." The student of public health legislation, when perusing the book now under review, might imagine that we have not as yet progressed beyond the procedure advocated in the writings of Mead, when on p. 116 he reads, "The master . . . . shall cause the ship and every article therein, to be disinfected or destroyed, *according to the direction of the M.O.H.*"

GAUTIER ON DIET AND DIETETICS.[1]

THIS is yet another addition to the many works on the important subject of diet, for although it has speedily run into a second edition, it is probable that to most of the profession it is a new work.

The work is divided into three portions, the first dealing with the chemistry, mechanics, and physiology of digestion; the second with foodstuffs, and their different constituents and values; whilst the third portion, probably the most valuable of all, treats of diets and regimens in the sick-room and for those ailing.

The modern treatment of a sick man consists of a diminution of drugs and other toxic agents, and a closer regard to correct alimentation: and more especially is this so when we have to prescribe for those who are not seriously ill, but who, owing to the demands of civilised life, suffer from the many ailments incidental to errors of assimilation.

In this book, all information which is desired on such a subject is found in full detail. Not only is the mechanism of digestion carefully discussed, but the balance sheet of supply and demand, of energy-expenditure and nutrition-income, is carefully and intelligibly drawn up.

A most frequent question which is asked by a patient's friends is, "What may he eat and drink?" A complete answer can be given after a perusal of Dr. Gautier's book.

It is a volume well worth careful study, and it will find a welcome and accessible place in the bookcase of the earnest practitioner, and also on the shelves of medical libraries.

We congratulate Dr. Rice Oxley on the excellency of his translation, and the freedom from idiomatic errors, which show that he must be almost a master of the French language.

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[1] "Diet and Dietetics." By A. Gautier. Edited and translated by A. J. Rice Oxley, M.D. Pp. 550. London: Archibald Constable and Co.

MARSDEN ON HINTS ON THE MANAGEMENT OF THE COMMONER INFECTIONS.[1]

ALTHOUGH sketchy in parts—which was only to be expected in a book of which the title is "Hints"—this small volume contains matter of considerable practical value; for in dealing with infectious diseases, it gives a more complete consideration of the details of treatment than is commonly met with in the ordinary text-books. In fact, one sees here the result of considerable experience in the valuation of such details. The first part of the book deals with "Fever" generally, and the most valuable section is that dealing with "The Methods of Applying Cold Water to the Skin," more especially with reference to the contraindications to cold baths. This latter question is discussed at length, and the contraindications are tabulated and summarised, and in our opinion this section alone is sufficient justification for the publication of the book. In dealing with the question of stimulants, the author is concise and clear, and although not disagreeing with the use of alcohol under any circumstances, arrives at the very definite conclusion that "the continuance of its use over any length of time is manifestly contraindicated." With this most physicians will agree. He is also of the opinion that "three to four ounces of strong spirit, *e.g.*, whisky or brandy, in the twenty-four hours is quite as much as an adult can deal with satisfactorily, and that this amount is too great to be continued for any length of time."

The second part deals with the various infectious diseases separately, and one is constantly meeting with practical "hints," which appeal strongly.

All methods of procedure, *e.g.*, nasal feeding, injection of antidiphtheritic serum, are described in detail, and there is a useful summary of the possible sequelæ of the use of serum. Altogether the book, from its strong imprint of experience, is one which well repays studying.

DALGADO ON THE CLIMATE OF LISBON, MONT ESTORIL AND CINTRA.[2]

THIS is the report of a paper read before the Section of Hygiene of the Fifteenth International Congress of Medicine, held at Lisbon, in which the author endeavours to show that the climate of Lisbon in winter as well as in other seasons is not variable, as is supposed by some, and that Mont Estoril as a winter health resort is in many respects superior to Biarritz, Nice and Catania, and that Cintra is a most charming summer health resort.

The pamphlet is pleasantly written by one who evidently is thoroughly acquainted with his subject, and should prove useful to any one contemplating residence in either of these Portuguese resorts.

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[1] "Hints on the Management of the Commoner Infections." By R. W. Marsden, M.D., M.R.C.P., D.P.H. Pp. 128. Price 3s. 6d. net. London: William Heinemann, 1906.

[2] "The Climate of Lisbon, Mont Estoril and Cintra." By Dr. D. S. Dalgado. Pp. 51. Price 2s. 6d. London: H. K. Lewis, 1906.

OLIVER ON STUDIES IN BLOOD PRESSURE.[1]

THE name of Oliver at once recalls "blood pressure." In this small book, which could be readily carried in one's pocket, is summarised by one of the pioneers in this difficult branch of study, all the details of procedure, the interpretations and the applications of hæmomanometry. It is divided into two parts, the first chiefly physiological, the second clinical.

The first part deals with the methods of hæmomanometry, being one of the advanced lectures on physiology delivered at the London University in 1905. To read it serves to show how difficult a problem is the obtaining of a true measure of the blood pressure, how many variations must be allowed for, and, finally, how difficult is the interpretation of the results obtained.

The second part, which deals with the clinical aspect of the study, was a lecture delivered at the Medical Graduates' College in 1906. It shows in how many pathological conditions there is an alteration of blood pressure, and indeed, how the knowledge of such alterations may be used in the diagnosis of the conditions. We fear, however, that the difficulties of the methods, and of the interpretations of their results, will prevent for some time hæmomanometry playing a usual part in the diagnostic methods of most practitioners. Nevertheless, the study is full of interest, and in this book are contained first-hand the methods and opinions of one of the greatest authorities on the subject.

MARTINDALE AND WESTCOTT'S EXTRA PHARMACOPŒIA.[2]

WE have again to record the appearance of another edition of this valuable work, namely, the twelfth. It is so universally known both to the profession and chemists, that it is unnecessary to describe it in detail, suffice it to say that it has established itself as *the* book of reference to the pharmacopœias not only of this country but of most others. The edition has been increased by the addition of 250 pages, and contains references to all the latest chemicals, drugs, preparations and methods of treatment, including such subjects as the standardisation and usage of X-rays, the trypsin treatment of cancer and new growths, and a new monograph on food preparations.

There is a most useful section on organotherapy, another on antitoxins; the latest methods of examination of the blood, and the last views on opsonins are described. Indeed, there is not a subject in which the medical practitioner is interested which he will not find discussed with ample references to its literature. The volume is replete with information and should be on the table of every medical man.

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[1] "Studies in Blood Pressure." By George Oliver, M.D.Lond., F.R.C.P. Pp. 146. London: H. K. Lewis, 1906.

[2] "The Extra Pharmacopœia." Revised by W. Harrison Martindale, Ph.D., F.C.S., and W. Wynn Westcott, M.B.Lond., D.P.H. Twelfth Edition, pp. 1075. Price 10s. net. London: H. K. Lewis, 1906.

RAWLING ON MUSCLES AND NERVES.[1]

THIS is a small handbook written for the purpose of enabling nurses and others interested in physical culture to understand the lie and action of the superficial muscles and their nerves. It consists of four excellent photographs of a muscular subject, each on a left-hand page, while on the right-hand is a diagrammatic representation of the same indicating the position of the various muscles and the direction of their fibres, and in three of the diagrams, the course, also, of the chief nerves. On the whole the drawings are fairly accurate, and clearly show what they are intended to demonstrate. The photographs themselves are particularly good.

MOTOR CARRIAGES FOR MEDICAL MEN.[2]

THIS is a booklet written to bring the advantages of the motor car, and more especially the De Dion Bouton Car, before the medical profession. To any one contemplating the purchase of a car, for use in practice, we can recommend its perusal, as it not only explains the various ways in which a motor vehicle is especially useful to a medical man, but it gives a number of communications from various doctors who have purchased De Dion cars, and who have forwarded accounts of their running expenses. A perusal of these will make the average motorist exceedingly envious, as they are all remarkably low, but there can be little doubt but that the small De Dion cars (and we note that nearly all the cars of which mention is made are 6 or 8 h.p.) have been remarkably successful and have given results far and away better than the small cars of other makers. We only regret that Messrs. De Dion Bouton have given up the manufacture of the 6 h.p. car.

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[1] "Muscles and Nerves." By L. B. Rawling, F.R.C.S. Price 3s. 6d. London: Scientific Press, Ltd., 1906.

[2] "Motor Carriages for Medical Men." Free on application. De Dion Bouton, Ltd., 10, Great Marlborough Street, London, W.

ANNUAL LIBRARY REPORT.

DURING the year ending May 31 the Library has had 54 new books added. Of this number, 6 were purchased, 3 presented, while the remainder were acquired by reviews in the Society's Journal.

The loans were nearly as large as last year, namely 395, being only 9 less than the previous twelve months.

In this matter the books borrowed through the annual subscription of £15 15s. with Messrs. Lewis were the most popular: this arrangement, it is needless to say, will be continued.

The financial position of the Library is quite satisfactory, and shows a balance to the good of £15 10s. 11d.—a gain of £4 9s. 0d. on the previous year.

Again we have to thank the Post-Graduate College for their continued interest and support, the above balance being in a large measure due to Post-Graduate subscriptions.

The members of the Society subscribing have been less than heretofore, a condition of things that ought not to occur, considering the large number of members and the unique benefits a small subscription carries with it.

HERBERT W. CHAMBERS,
June, 1906. *Hon. Librarian.*

LIST OF BOOKS RECEIVED.

A Handbook for Midwives and Maternity Nurses. By Comyns Berkeley, M.B., B.C.Camb., M.R.C.P. London: Cassell and Co., Ltd., 1906.

The Public Health Acts, and other Sanitary Laws and Regulations. By Martin Elliott and Gilbert Elliott, M.R.C.S., L.R.C.P., D.P.H. London: H. K. Lewis, 1906.

Diet and Dietetics. By A. Gautier. Edited and translated by A. J. Rice Oxley, M.D. London: Archibald Constable and Co., 1906.

Hints on the Management of the Commoner Infections. By R. W. Marsden, M.D., M.R.C.P., D.P.H. London: William Heinemann, 1906.

The Test Diet in Intestinal Diseases. By Professor Dr. Adolf Schmidt. Translated by Chas. D. Aaron, M.D. Philadelphia: F. A. Davis and Co., 1906.

The Climate of Lisbon, Mont Estoril and Cintra. By D. S. Dalgado, M.D. London: H. K. Lewis, 1906.

Studies in Blood Pressure. By George Oliver, M.D., F.R.C.P. London: H. K. Lewis, 1906.

The Extra Pharmacopœia. 12th edition. By W. Harrison Martindale, Ph.D., F.C.S., and W. Wynn Westcott, M.B. Lond., D.P.H. London: H. K. Lewis, 1906.

Muscles and Nerves. By Lewis B. Rawlings, F.R.C.S. London: The Scientific Press, Ltd., 1906.

Motor Cars for Medical Men. London: De Dion Bouton, Ltd., 1906.

THE POST-GRADUATE COLLEGE.

By the Dean.

The vacation course commenced on Monday, August 13, and was well attended. During the past three months 54 new members have joined. Amongst these have been 13 officers of the Royal Naval Service, 15 of the Royal Army Medical Corps, 3 of the Indian Medical Service, 18 from the Colonies and abroad, and 15 from the United Kingdom. The number of Life Members is now 69. Special classes have been very well attended, and have been held in the following subjects: Ophthalmology, Practical Administration of Anæsthetics, Examination of Throat, Nose, Ear, Intestinal Anastomoses, Skiagraphy, Bacteriology, the Clinical Examination of Blood and Urine, Tropical Diseases, and Operative Surgery.

We wish to congratulate Captains V. Bennett and J. H. Hugo, D.S.O., of the Indian Medical Service, on obtaining the Fellowship of the Royal College of Surgeons, England. Also Dr. J. A. B. Sim, on obtaining a commission in the Royal Army Medical Corps, and Drs. A. S. Leslie and W. M. Thomson on obtaining a commission in the Indian Medical Service. The Annual Dinner of the West London Hospital and Post-Graduate College, was held at the Trocadero Restaurant, on Thursday, June 28. The chair was taken by Mr. Stephen Paget.

Owing to the reflooring of two of the wards and of the theatre, the number of beds for urgent cases is temporarily reduced, but there is still plenty of clinical material for teaching purposes.

The introductory lecture of the Winter Session will be delivered by Mr. C. B. Keetley on Wednesday, October 10, at 4.30 p.m.

The following is a list of Life Members and of Post-

Graduates who have attended the practice of the West London Hospital for the past three months. An asterisk is placed agains the names of those who are Life Members :—

Chas. D. Aaron (Detroit).
*L. H. Armstrong (Ripon).
G. P. Adshead (Macclesfield).
Lt.-Col. A. Alcock, I.M.S.
W. J. J. Arnold (St. Helena).
A. W. Atkinson (Crewe).
*G. J. Bagram (Bayswater).
Cecil R. M. Baker (Westward Ho).
*A. Baldock (Earl's Court).
Surgeon P. H. Bannister, R.N.
Surgeon W. Bastian, R.N.
*W. E. Barton (Streatham).
*A. G. Beale (Kensal Rise).
*Dep. Insp.-Gen. R. Bentham, R.N.
*R. D. Brinton (S. Kensington).
Fleet-Surgeon G. T. Broatch, R.N.
*H. F. Browne (Langham Street).
*W. M. Burgess (Harlesden).
*Capt. Carmody, R.A.M.C.
*Lt.-Col. E. R. W. Carroll, I.M.S.
H. W. Chambers (Hon. Member, Shepherd's Bush).
Staff-Surgeon H. J. Chater, R.N.
*Col. L. A. Clutterbuck (Bayswater).
E. A. Chill (Ealing).
F. Cordero (Costa Rica, Peru).
*E. J. Coulson (Fulham).
H. Evelyn Crook (Twickenham).
*J. S. Curgenven (Bayswater).
Lt.-Col. T. Daly, R.A.M.C.
Surgeon G. S. Davidge, R.N.
G. G. Davidson (W. Kensington).
F. S. Dawe (Chiswick).
*L. Dobson (Kensington).
Valentine de S. Duke (Ceylon).
W. Barclay Dick (West Ealing).
George F. Edwards (Bexley).
F. Carleton Evans (Kilburn).
*A. St. Aubyn Farrer (Paddington).
*W. H. Fitzmaurice (Dunmanway).
*Fleet-Surgeon A. M. French, R.N.
W. E. Fry (Hammersmith).
R. C. Galgey (Cork).
*M. N. Gandevia (Ceylon).
*F. Gans (West Kensington).
*H. M. Gay (Bushey, Herts).
*D. Gault (New Zealand).
Lieut. K. C. Gharpurey, I.M.S.
*A. J. Grant (West Kensington).
*W. Grantham-Hill (Chiswick).
J. K. Grimmer (Hounslow).
*C. H. Haines (Kensington).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
*A. Harrison (Yeovil).
*N. Heard (Swanage).
E. W. Hedley (Westminster).
Capt. D. E. Harvey, R.A.M.C.
F. Brunel Hawes (Chili).
Surgeon R. R. Horley, R.N.
Gustav Hahn (Nebraska).
Fleet-Surgeon W. Hackett, R.N.
W. J. Harrison (Newcastle).
Fleet-Surgeon D'Arcy Harvey, R.N.
Frank Hitchins (Redruth).
*W. C. James (Kensington).
*Capt. R. C. Johnson, R.A.M.C.
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (Chiswick).
C. A. Lees (West Ealing).
E. W. Kellog (Montana).
D. Kabosi (Alexandria).
Alfred Lawther (Winnipeg).
*T. M. Legge (Temple).
*T. Ligertwood (Chelsea).
*J. Lynes (Kensington).
*A. B. Lyon (Hammersmith).
*Norman McDonald (Harlesden).
*J. B. Mackay (Newport, I.W.).
*H. McNickle (Vauxhall).
*G. Maguire (Kew).
*D. F. Maunsell (S. Kensington).
A. G. Meares (Melbourne).
H. T. N. Merrick (W. Kensington).
Frank Morgan (West Norwood).
Major G. T. Mould, I.M.S.
*B. W. Mudd (Storrington).
*W. Nolan (Bayswater).
G. J. McCoull (Newcastle).
Capt. P. Mackessack, R.A.M.C.
Leon Matassariu (Roumania).
F. J. Molony (Dunster Deep).
Fleet-Surgeon John Moore, R.N.
Fleet-Surgeon J. A. Moon, R.N.
H. H. Mills (Kensington).
*W. Norbury (Kensington).
C. D. Nuttall (St. Albans).
*R. W. Olver (New South Wales).
*H. M. Page (Kensington).
H. Compton Parsons (Torrington).
W. Harland Peake (Hampstead).
*A. F. Penny (Chelsea).
Douglas R. Pike (Kensington).
*R. D. Pollock (Acton).
J. Farquahar Philip (West Ealing).
*A. Renny (Southampton).
F. B. Oliphant (Antigua).
Lt.-Col. R. Pemberton, I.M.S.

*A. H. Rideal (Twickenham).
*Patrick Robertson (Canada).
*A. Tait Robinson (London).
W. Renner (Sierra Leone).
*Neil Robson (Sittingbourne).
*F. E. Rock (Huddersfield).
*T. Mackay Ross (Fulham).
*Lt.-Col. A. Silcock, I.M.S.
*G. A. Garry Simpson (Hyde Park).
*A. Ross Sinclair (Parson's Green).
W. Slater (Wanstead).
*H. H. Sturge (Maida Vale).
*E. Swain (Hampton Hill).
C. Thackray (St. Pancras).
Fleet-Surgeon M. J. Smith, R. N.
Staff-Surgeon H. W. B. Shewell, R.N.
H. Tyldesley (Kentucky).
J. Telfer Thomas (Cambourne).
Staff-Surgeon W. H. Thomson, R.N.
J. Lewes Timmins (Acton).
E. F. Travers (Kensington).
A. de Vallency, (Hammersmith).
*L. A. Walker (Lee-on-the Solent).
James Wallace (Acton).
V. S. Valiathan (India).
A. W. Weysse (Boston, U.S.A.).
C. S. Willis (Sydney).
T. P. Welsh (St. Petersburgh, U.S.A.).
H. W. Walter (Brentford).
J. Williamson (Putney).
C. E. A. Wilson (Kensington).
J. H. Wolfe (Hanwell).
*A. P. Woodforde (Shepherd's Bush).

ANNUAL DINNER OF THE POST-GRADUATE COLLEGE.

The Ninth Annual Dinner of the College was held at the Trocadero Restaurant on June 28, when the chair was taken by Mr. Stephen Paget. The attendance was again large, and included nearly all the members of the Hospital staff and about 100 post-graduates and past residents. After the usual loyal toasts, the "Imperial Forces" was proposed by Mr. D. J. Armour, who referred especially to the value and patriotism of Canada in defence of the Empire. The toast was replied to by Inspector-General H. M. Ellis (Medical Director-General Royal Navy), who referred to the great value of the College to the medical officers of the Royal Navy, and stated that nearly all his officers who obtained study leave had spent that leave at the West London Hospital, and were enthusiastic in praise of the arrangements made there.

The Chairman then proposed "The Hospital" in a delightfully humourous speech. He drew weird pictures of the Hospital in its infancy, and then described his dreams of the Hospital as it would be in the future. In its present position it had long ceased to be a local institution, but it was now occupying an important position among the London Hospitals, and as it was constantly progressing they were all proud to believe that it would eventually occupy a more important position each year.

In the absence of the Duke of Abercorn, through ill-health,

Mr. G. F. Marshall (Chairman of the House Committee), replied to the toast, and stated that whatever might be the case with other hospitals, at the West London the interests of the College and of the Hospital were undeniably mingled and he could not wish anything better.

The toast of "The Post-Graduate College" was proposed by Surgeon-General Branfoot (Resident of the Medical Branch of the India Office), who bore testimony to the work of the College in relation to the Indian Medical Service. He considered that the courses at the College were admirably adapted to the needs of the officers who had obtained study leave.

He was answered by Mr. L. Bidwell (the Dean), who traced the history of the College, and stated that some 1,100 medical men had now taken advantage of its existence. The first in the field, its success had naturally led to the opening of other institutions; that they had no cause to fear rivalry, and were likely at least to hold their own in competition, was shown by the fact that during the past year the number of entrants (226) had greatly increased, the total being as large as at any London school, even for ordinary students. The College had developed mainly in the formation of special classes, and amongst the most important of them were those held by Dr. Low in tropical diseases, a branch of study especially necessary to those post-graduates who come from abroad.

Response to the toast was also made by Mr. C. A. Lees, of Ealing. After discussing the great value of post-graduate study to those who, like himself, were in general practice, he gave a very clear description of the difficulties encountered by any one who endeavoured to pursue it at an ordinary medical school, even if he were one of its former students and well known to all the staff. *Per contra*, he showed how the needs of men in practice were studied at the West London, and the facilities which the School offered for getting up to date in any branch of clinical science.

The guests were toasted, with a speech by Dr. A. E. Russell, which elicited a delightful reply from Mr. Danvers Viner, one of the Secretaries to the King's Hospital Fund.

The health of the Chairman, proposed by Dr. Shuter, was received with musical honours, and his reply brought a very pleasant evening to an end.

The chief attraction in the dinner was the really excellent character of the speeches, which were all short and full of interest. Mr. Algernon Clarke's orchestra performed a selection during and after dinner.

The following is a list of those present:—

Abraham, Dr., and guest.
Armour, D. J.
Arthur, Dr., and guest.
Baldwin, A.
Ball, Dr. J. B., and guests.
Bell, Fleet-Surgeon, and guest.
Betteridge, A., and guest.
Bidwell, L. A., and guest.
Bird, R.
Branfoot, Surgeon-General.
Buttar, Dr.
Chill, Dr.
Clarke, W. Bruce.
Clippingdale, Dr. S.
Close, Major.
Cole, Dr. R. H., and guest.
Collingwood, Fleet-Surgeon.
Colman, Dr., and guests.
Cooke, Dr. James.
Cooper, Dr. Austin.
Copeman, Dr. A. H., and guest.
Cowan, J., and guest.
Daly, Lieutenant-Colonel.
Director-General Navy Medical Service.
Drewitt, Dr. F. D.
Dunn, P.
Eccles, W. McAdam, and guests.
Editor, *British Medical Journal.*
,, *Daily Telegraph.*
,, *Lancet.*
,, *Morning Post.*
,, *Times.*
Edwards, F. S.
Elliott, Dr. A., and guest.
Fedarb, Staff-Surgeon.
Gharpurey, Lieutenant, and guest.
Gilbert, R. J.
Girvin, Major.
Hood, Dr. D.
Jones, Dr. R.
Keetley, C. B., and guests.
King, A. W.
Lees, C. A.
Low, F. H.
Low, Dr. G. C.
Macdougal, E. D., and guest.
McElwee, Fleet-Surgeon.
Marshall, G. F.
Marshall, A.
Meachen, Dr. N.
Nolan, Dr., and guest.
O'Keefe, Colonel, and guest.
Paget, S.
Page, H. N.
Pardoe, J., and guest.
Penny, Dr. A. F.
Power, Danvers.
Rawle, H. Grant.
Resident Medical Officers.
Russell, Dr. A. E., and guests.
Rutherford, Mr., M.P.
Saunders, Dr. E. A., and guests.
Shuter, Dr. G. P.
Searson, J., and guests.
Smith, H. Gordon.
Turner, Dr. W. A., and guest.
Wheeler, L.
Williams, Chisholm, and guests.
Williams, H. Lloyd, and guests.
Wilson, Colonel E. M.

NOTES ON NEW PREPARATIONS, &c.

Messrs. William Edgar, Blenheim Works, Hammersmith, W.—We have had the opportunity to examine the "Blenheim" Gas Fires, manufactured and invented by Mr. William Edgar. This patent gas fire consists of a series of Bunsen tubes, so made that they cannot become blocked by falling pieces of asbestos. The gas-way is composed of a series of fine holes, each hole being calculated to consume a maximum of one cubic foot of gas per hour. If lighted by a taper applied to the spot marked in the stove, there is no chance of a small explosion taking place, the report of which is often so alarming and disagreeable. The fire is fitted with a duplex

tap, by means of which it can be turned down to an incandescent glow, and the heat of the room can thus be regulated. The fire has a specially constructed air chamber, the feature of which is its silence. It is designed to prevent "lighting back."

The price of this fire is moderate. If fitted complete with patent duplex and specially designed firebrick back (including fitting), the total cost is only 32s., but the fire alone can be obtained, complete but not fitted, for 17s. The fires have a very good appearance, and are very well finished in every respect.

The Sanatogen Company, 83, Upper Thames Street, E.C.—We have received from the above Company specimens of Sanatogen for examination. This food preparation is now well known, and, we consider, deservedly popular with the medical profession. It is a preparation of the casein of milk, and is therefore a very concentrated proteid food, containing, as it does, 95 per cent. of casein. The remaining 5 per cent. is glycerophosphate of sodium, and this forms the feature of the food, as the manufacturers claim for it the action of organic phosphorus.

Sanatogen is readily soluble in soups, tea, and similar beverages, puddings, jellies, and, indeed, can be given in practically any way that may be desired, a point of considerable importance when it is necessary to give a concentrated nourishment without directly bringing to the patient's notice the fact that he is being "fed up."

Sanatogen appears to be very easily absorbed and assimilated. From no case from amongst a large number to whom this food has been administered have we had any complaint of inability to digest it or distaste caused by its continued use.

Sanatogen may be classed as a valuable addition to the list of concentrated proteid foods, palatable, easily used, easily assimilated, and moderate in price.

Messrs. Nicolay and Co., 36, St. Andrew's Hill, E.C.—Hommel's Hæmatogen has been noticed before in these columns, but a fresh departure has been made by the manufacturers, which we think will prove of interest to our readers.

The former formula of hæmatogen contained 10 per cent. of wine, and therefore a definite, though slight, proportion of alcohol. This is now omitted, and Hommel's hæmatogen is now entirely alcohol free.

Many foods have fallen under the condemnation of the medical profession for owing their agreeable properties to

the alcohol contained in them, the stimulant effects of which have been blamed for inducing the alcohol habit in patients who have gradually increased the dose. We therefore are exceedingly glad to welcome what we consider to be a move in the right direction on the part of the manufacturers of hæmatogen. Hæmatogen now has the following formula :—

Purified and concentrated hæmoglobin ...	80 per cent.
Purified glycerine	20 ,,
Aromatic flavouring	A trace.

and will be found a very agreeable, useful and absolutely non-alcoholic preparation.

The Miol Manufacturing Company, Ltd., 66, Southwark Bridge Road, S.W.—We have examined and tested "Miol," a new preparation of iodo-phosphated dextro-maltose and olive oil.

By microscopic examination we find Miol to be a homogeneous emulsion, the oil particles being in a state of very fine sub-division. The formula for this novel preparation is as follows :—

Iodine	1·32 gr.	In each teaspoonful.
Phosphorus	1·100 ,,	
Dextro-maltose	40 per cent.	
Finest olive oil	30 ,,	
Nutrient excipients		

We consider this preparation an admirable alternative to cod liver oil. It is not at all unpleasant to the taste, is easily digested, and possesses marked nutritive and tonic properties, in addition to the specific action of the iodine and phosphorous, which are both in a free condition in the mixture.

We have found children take it readily, and do exceedingly well upon it. In congenital and acquired syphilis, tuberculous disease of bone and glands, and in phthisis it has proved of marked value. It is a novel and elegant preparation, and we think will meet with an increasingly favourable reception at the hands of the medical profession.

M. Zaro, 106, Fenchurch Street, E.C.—We have received from the above firm a new food product named Carbovis, manufactured by the Carbovis Co., Ltd., Paris. Carbovis is not a medicine, and, indeed, has no admixture of drugs with it. It is raw, pure beef-powder, prepared at a temperature of 95° F. from prime ox beef. It, therefore, is claimed that Carbovis retains all the albuminoids of muscle plasma in an uncooked condition, and is an exceedingly simple and handy substitute for raw beef-juice or chopped raw meat. It

can be mixed with almost any food, but one precaution must be observed, namely, it must be added to food when cold, or, at all events, when at a temperature not exceeding 105° F., as it must not be cooked. Carbovis is sold in packages containing 7 ozs.

NOTES AND NEWS.

Once more we stand at the commencement of a new Session, and the report of the last one shows nothing but progress. As was to be expected with such a popular and well-known President as Mr. L. Bidwell everything went well. Our numbers have increased; the attendance at some of the meetings was very large. The Annual Dinner was a successful one, and the change of venue of the Conversazione from the Hammersmith to the Kensington Town Hall a decided improvement. It will be difficult to emulate the success of the past session, but we feel sure that with Dr. Leonard Mark as our new President, everything will be done to ensure the continued prosperity of the Society.

We should like to take this opportunity of reminding our new Members that the Journal Committee is always ready to welcome contributions to the Journal, either in the form of Original Communications, or descriptions of cases under the heading of the "Mirror of Practice." It is often very difficult to get contributions of material for the Journal, and yet with our large numbers the supply should far outrun the space at command. All MSS. should be forwarded to the Editor, who will at once acknowledge them.

Owing to the holidays the supply of news in the papers in the past two months has been limited, and so they have interested themselves in discussions on all sorts of matters, from the question of whether we are born again, to the latest discovery for the cure of cancer. Such subjects as the latter are discussed and commented on in such a way that it is evident they have been contributed by medical men with more or less knowledge of the subject. It used to be urged as a reproach to scientific medicine, that it surrounded itself with mystery and refused to take the public into its confidence, guarding its secrets jealously from the laity. This reproach can no longer be maintained now that the cures for consumption and cancer are published to the world in the lay

press long before they have have been put to the test of actual experience. It is impossible to calculate the misery that followed the false hopes created by the premature publication of the tuberculin discovery. The failures of the early experiments with this substance not only abolished the hopes of thousands of tuberculous patients, but threw discredit upon scientific medicine and brought a really valuable remedy into such disrepute that it was years before its definite position as a therapeutic measure was established. The harm that is done by these discussions of so-called cures is immense, and can only be estimated by those in charge of a large number of patients, when they are able to see how these poor sufferers have in many cases been advised, in some cases almost compelled, to neglect aid which might prove of some material benefit, in order to try some vaunted but practically unknown cure.

THE opener of the discussion at Toronto on the Teaching of Obstetrics, when pointing out that the mortality of puerperal sepsis outside hospitals was far too high, repeated the old charge against the general practitioner, that this mortality was practically due to want of care or skill on his part, and indirectly to faulty teaching. We should have thought that this charge had been adequately refuted in the mass of correspondence that has taken place in the medical journals on this subject during the last few months. Briefly stated, the charge is as follows: The mortality from puerperal sepsis is considerably higher among women attended at their own homes than in lying-in hospitals, and therefore the medical practitioner in charge of these cases must be at fault. But surely it has been pointed out over and over again, that the majority of women confined in this country are not attended by a medical man at all, and that it is only in cases such as these that he is called in at the last, when it is almost too late to do anything but sign the death certificate and get the credit of the loss of a patient from puerperal fever. When one considers the conditions and surroundings of many of the homes in which confinements take place, it is more a matter of astonishment that the mortality from puerperal sepsis is not much higher than it is, and when, in addition, the ignorance and dirty habits of many of the so-called midwives and nurses are taken into account, our wonder is increased. We have but recently heard of a case in which a so-called nurse to a woman recently confined, made a practice of giving a rectal enema first, and then a vaginal douche immediately afterwards with the same syringe and nozzle. The case naturally

terminated in a severe attack of puerperal sepsis, and the patient's life was only saved by the unremitting care and skill of the medical man called in. If the patient had died this would have been classified as one more death from puerperal sepsis under the care of a medical man, and would have supplied one more peg on which to hang the charge of want of knowledge and skill amongst the general practitioners. We are fully aware that efforts are being made to purge the Register of Midwives of grossly ignorant and dirty women, but we think it is time that the leaders of the obstetric profession should recognise where the fault lies, and abstain from reiterating this charge against members of their profession, who, in many cases, have had far more experience in attending confinements than they themselves can have had.

MR. HERBERT CHAMBERS has forwarded to us the following notes on the Army Medical Civilian Reserve. The course of instruction to Civilian Doctors held during the early part of the year terminated on June 23 in a practical demonstration of Field Work by the London Companies of the Royal Army Medical Volunteer Corps under the command of Colonel Valentine Matthews, who personally instructed the class and did his utmost to make the manœuvres intelligible to the visiting civilians. The scheme carried out involved the retirement after an adverse action of a Bearer Division with its waggons and *personnel*, located in Richmond Park, on a Tent Division situated at The Priory, Roehampton Lane. Before this movement was in operation Colonel Matthews demonstrated the component parts of a Field Dressing Station, and enabled the visitors to view the carriage of "Wounded" by Stretcher Squads to the waggons, immediately behind the firing lines. The actual retirement was effected in a most expeditious manner, and on arrival at the Base, a Tent Division was ready for the reception of the "Casualties," with its lines of Tents, Kitchens, Commissariat and other details.

The officers and men of Volunteer Corps, as well as the Civilian Officers, were afterwards entertained most hospitably by Dr. James Chambers at his residence, The Priory.

The proceedings were altogether most enjoyable and instructive and formed a fitting termination to the series of lectures and demonstrations so successfully inaugurated.

THE first meeting of the Cavendish Lodge of Freemasons for the Session 1906-7 will be held at Oddeninos' Restaurant, Regent Street, on Tuesday, October 9.

This meeting will be especially interesting to Masonic Members of the Society, being the occasion on which their esteemed Treasurer, Brother Gunton Alderton, will be installed W.M.

The last Session was in every way satisfactory, there being more Initiates than for some years. Brother W. McCann may be congratulated on the success of his year of office.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 71, Holland Park Avenue, W.; those concerning business matters, advertisements, non-delivery of the Journal, &c., should be addressed to the Editorial Secretary, 77, Wimpole Street, W.

Authors desiring reprints of their articles published in the WEST LONDON MEDICAL JOURNAL are requested to communicate with the Editorial Secretary, 77, Wimpole Street, W. Reprints can be obtained at the following prices, if ordered before the publication of the Journal:—

	Pp. 1-4	Pp. 4-8	Pp. 8-16
50 copies	6/-	9/-	12/6
100 copies	7/6	12/-	16/-
200 copies	10/6	16/-	25/-

Special rates are quoted for longer reprints.

We wish to remind members that our columns are always open to them if they will forward to us papers which may be published as original communications, or interesting cases for the "Mirror of Practice." General practitioners, as well as specialists, are constantly meeting with cases of exceptional interest to all of us, and we shall always be pleased to publish them, if they will send them at least a month before publication.

REPORT FOR THE SESSION 1905-6.

Presented by the Council at the Twenty-fourth Annual General Meeting, July 6, 1906.

YOUR Council, in presenting its Annual Report for the Twenty-fourth Session, has again great pleasure in congratulating the Members upon the continued growth and prosperity of the Society.

The Council regret to have to report the death of one Honorary Member, viz., Sir J. Burdon Sanderson, Bart., and five Subscribing Members, namely, Dr. H. T. Griffith, Mr. Cyril J. Grindrod, Dr. W. Hooper Masters, Dr. H. Campbell Pope, and Dr. R. M. Ralph, and one Foreign Member, Mr. T. F. Odling. Thirteen Members have resigned during the Session, and 56 new Subscribing Members have been elected. Thus there is an increase of 38 Members of the Society, the total membership now amounting to 656.

The financial position of the Society continues most satisfactorily under the able management of the Hon. Treasurer, who again reports a substantial balance.

The Journal, owing to the unceasing efforts of the Editor, Dr. L. Dobson, and the Editorial Secretary, Mr. J. G. Pardoe, has further increased in size and circulation.

The Library has also increased in every direction under the energetic care of the Hon. Librarian, Mr. H. W. Chambers. Fifty-four new volumes have been added during the past session, and the arrangement with Messrs. Lewis and Co. for borrowing books continues to be satisfactory.

The Annual Dinner of the Society was held in the Wharncliffe Rooms, Hotel Great Central, on Wednesday, February 7, 1906. The Council are proud to be able to report a record attendance on that occasion, the total number of guests and members being 157.

A handsome President's Badge was presented to the Society by the President, Mr. L. A. Bidwell, which was gratefully accepted by Mr. Lawrance on behalf of the Members.

The Ordinary Meeting of February 2 was devoted to the exhibition of Pathological Specimens, &c., which proved so attractive that between eighty and ninety Members were present.

Owing to the limited space at the Hammersmith Town Hall, and to the increasing popularity of the Annual Exhibition, it was held at the Kensington Town Hall, on Friday, June 8, when the Cavendish Lecture was delivered by Sir William Macewen, M.D., F.R.S., the subject being "Some Points on the Surgery of the Lung." The President and Council afterwards entertained a large number of Members and friends at a Conversazione.

The Ordinary Meetings were well attended, the average attendance for the eight Meetings held from October to May being 48, and the following Papers and Clinical Cases were brought before the Society at these Meetings.

CLINICAL CASES.

(1) The PRESIDENT.—Congenital Syphilitic Tongue.
Congenital Papilloma of Tongue.
Rodent Ulcer Developing on an Old Syphilide.

(2) Dr. P. S. ABRAHAM.—Erythematous Lupus.
Dermatitis Exfoliativa.
Cornu Cutaneum.
Impetigo Contagiosa.

(3) Mr. DONALD ARMOUR.—A Patient from whom a Polycystic Kidney was Removed Sixteen Months previously.
Bony Ankylosis of Jaw treated by Excision.

(4) Mr. ASLETT BALDWIN.—Congenital Elevation of Scapula.
Hereditary Ataxia, with Deformity of the Feet.

(5) Dr. S. A. BONTOR.—Pernicious Anæmia.

(6) Dr. J. F. HALLS DALLY.—Chronic Gout.

(7) Dr. L. DOBSON.—Tumour of Mouth.
Lupus, treated by Cataphoresis.
Peripheral Neuritis.
Epithelioma of the Ear.

(8) Mr. W. MCADAM ECCLES.—Two Cases of Adolescent Coxa Vara.

(9) Dr. A. ELLIOT.—Central Embolism of Central Artery of Retina.

(10) Dr. LAMING EVANS.—Coxa Vara.

(11) Mr. HOWELL EVANS.—Two Cases of Acanthoma.

(12) Mr. E. P. PATON.—Molluscum Fibrosum.

(13) Dr. A. E. RUSSELL.—Acromegaly.

(14) Dr. ARTHUR SAUNDERS.—Osteitis Deformans.
Myxœdema.
Progressive Muscular Atrophy.
Rickets.
Scleroderma.
Specific Osteitis.
Congenital Specific Osteitis.

(15) Mr. C. B. KEETLEY.—Quadriceps Muscle torn from Patella.
Ruptured Kidney.

(16) Dr. SEYMOUR TAYLOR.—Myoclonus.
Gumma of Pons Varolii.
Two Cases of Tabes Dorsalis.

(17) Mr. GARRY SIMPSON.—Congenital Ichthyosis.

PAPERS.

(1) PRESIDENTIAL ADDRESS.—The Progress of Intestinal Surgery.

(2) Dr. S. A. BONTOR.—Jamaica as a Health Resort (illustrated by lantern slides).

(3) Dr. W. S. COLMAN.—Some French Health Resorts (illustrated by lantern slides).

(4) Dr. J. A. COUTTS.—On some Points in Infantile Scurvy.

(5) Dr. SEYMOUR TAYLOR. — Influenza, its Varieties and Sequelæ.

(6) Dr. E. FURNISS POTTER.—Reflections on the Treatment of Chronic Otorrhœa.

THE CAVENDISH LECTURE.

Sir WILLIAM MACEWEN.—Some Points on the Surgery of the Lung.

PATHOLOGICAL SPECIMENS, ETC., SHOWN BY

(1) The PRESIDENT.—(*a*) Tumour of Omentum, (*b*) Sarcoma of Femur, (*c*) Carcinoma of Pylorus, (*d*) Various Calculi, and (*e*) Photographs.

(2) Mr. C. B. KEETLEY.—Lantern slides.

(3) Mr. MCADAM ECCLES.—(*a*) Stomach from Case of Gastrectomy, (*b*) Section from Growth in the Mouth.

(4) Mr. A. W. G. WOODEFORDE (introduced by Mr. Eccles).—Spirochætes of (*a*) Relapsing Fever, (*b*) Syphilis, (*c*) Vincent's Angina, (*d*) Urethra.

(5) Dr. D. W. C. HOOD.—Drawings.

(6) Dr. MANSELL MOULLIN.—(*a*) Fibroma of Uterus, (*b*) Ectopic Gestation, (*c*) Salpingitis.

(7) Dr. A. E. RUSSELL.—Microscopic specimens.

(8) Mr. J. G. PARDOE.—Microscopic specimens.

(9) Mr. HAMILTON WRIGHT.—Microscopic slides of Beri-beri.

(10) Dr. J. R. LUNN. — (*a*) Photographs, (*b*) Specimens, (*c*) Microscopic section.

(11) Mr. GEO. PERNET.—(*a*) Microscopic slides, (*b*) Photographs.

(12) Dr. A. MORISON.—Lantern slides.

(13) Dr. L. S. DUDGEON.—Microscopic slides.

(14) Mr. W. L. HARNET.—Microscopic slides.

(15) Dr. O. GRÜNBAUM.—Gumma of Ventricular Septum.

(16) Dr. L. MARK.—Diagrams.

(17) Dr. F. SHERWILL DAWE.—Microscopic slides and bones.

(18) Dr. J. A. COUTTS.—(*a*) Infantile Stomach with Stenosis of Pylorus, (*b*) Obstruction of Duodenum (Infantile).

(19) Mr. CHISHOLM WILLIAMS.—X-Ray lantern slides.

(20) Mr. R. LAKE.—Microscopic slides.

(21) Dr. D. ARTHUR.—Skiagrams.

Signed on behalf of the Council,

L. A. BIDWELL, *President.*

W. H. WALTER,
E. P. PATON, } *Hon. Secretaries.*

Dr. STATEMENT OF ACCOUNTS—FINANCIAL YEAR ENDING MAY 31, 1906. Cr.

RECEIPTS.	£ s. d.	£ s. d.
To Balance in hand from last Account		139 2 11
,, Subscriptions, including arrears collected	150 0 7	
,, Subscriptions paid in advance	4 0 0	
,, Balance from Dinner Fund	0 18 0	
		154 18 7
,, Interest on Deposit, as per Bank Book		1 11 4
,, Subscriptions in arrear, May 31, 1906	47 10 0	
,, Subscriptions in arrear previous to May 31, 1905	36 10 0	
		84 0 0
		£379 12 10

EXPENDITURE.	£ s. d.	£ s. d.
By Grant to West London Medical Journal		35 0 0
,, ,, Library Fund		5 0 0
,, Post-Graduate College, for use of Rooms		20 0 0
,, Printing and Stationery, &c. :—		
Messrs. Churchman	20 9 11	
Editorial Secretary for Annual Report, &c.	10 1 3	
		30 11 2
,, Refreshments, &c.—Schornsheim		5 16 6
,, Servant's Wages		1 7 0
,, Postage, Telegrams, &c. :—		
Dr. Elliot, Session 1904-05	1 0 6	
Dr. Walter ,, 1905-06	2 14 10	
Mr. Paton ,, ,,	0 10 0	
Treasurer for Stamped Envelopes	4 9 7	
Messrs. Churchman	16 0 0	
		24 14 11
,, Balance, Hire Town Hall for Cavendish Lecture, 1905		4 16 0
,, Assistance with Lantern		1 2 6
,, Baker, Hire of Microscopes		2 1 0
,, Lewington, Wreath		1 1 0
,, Coulton and Wickenden, Cards and Stands		1 1 0
,, Cheque Book		0 2 1
		132 13 2
,, Deposit London and County Bank	100 0 0	
,, Balance at Bank, May 31, 1906 £62 1 9		
Less unpresented Cheque 1 11 10		
	60 9 11	
,, Cash in hands of Treasurer	2 9 9	
		162 19 8
,, Arrears of Subscriptions		84 0 0
		£379 12 10

June 7, 1906.

Audited and found correct, (Signed) W. E. C. MUSSON.
WALTER E. FRY.

Dr. LIBRARY FUND, 1905-6. Cr.

RECEIPTS.	£ s. d.
Balance in hand	11 1 11
Subscriptions from Members of the Society	6 16 6
Post-Graduate College	14 4 0
Grant from Society	5 0 0
	£37 2 5

EXPENDITURE.	£ s. d.
Messrs. Lewis (subscription)	15 15 0
Fire Insurance	0 3 0
New Books	5 13 6
Balance at Bank	15 10 11
	£37 2 5

Audited and found correct, (Signed) W. E. C. MUSSON.
WALTER E. FRY.

OFFICERS AND COUNCIL.

SESSION 1906-1907.

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Editor of Journal.

DR. LEONARD DOBSON.

Editorial Secretary.

MR. J. G. PARDOE.

*Did not hold similar office last year.

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1882-1883. E. HART VINEN, M.D.
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1884-1885. F. LAWRANCE.
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1886-1887. F. H. ALDERSON, M.D.
1887-1888. C. B. KEETLEY.
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1897-1898. H. P. POTTER, M.D.
1898-1899. S. D. CLIPPINGDALE, M.D.
1899-1900. J. B. BALL, M.D.
1900-1901. F. F. SCHACHT, M.D.
1901-1902. SIR ALFRED COOPER.
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1903-1904. SEYMOUR TAYLOR, M.D.
1904-1905. C. MOLESWORTH TUKE.
1905-1906. L. A. BIDWELL.

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1898. HOWARD MARSH, M.C.
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1900. H. T. BUTLIN, D.C.L.
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1905 JAMES F. GOODHART, M.D.
1906. SIR WILLIAM MACEWEN, M.D., F.R.S.

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(Corrected to September, 1906.)

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JONATHAN HUTCHINSON, D.Sc., LL.D., F.R.S., 15, Cavendish Square, W.
His Excellency JOHN DUNCAN, M.D. (of St. Petersburg).
Prof. WILLIAM OSLER, M.D., D.Sc., LL.D., F.R.S., Oxford.
Sir R. DOUGLAS POWELL, Bart., K.C.V.O., M.D., 62, Wimpole Street, W.
Sir T. LAUDER BRUNTON, M.D., F.R.S., 10, Stratford Place, W.
Sir FREDERICK TREVES, Bart., C.B., G.C.V.O., 6, Wimpole Street, W.

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(Not Ex-officio Members of Council).

F. LAWRANCE.
F. H. ALDERSON, M.D.
C. B. KEETLEY.
W. TRAVERS, M.D.
T. GUNTON ALDERTON
F. S. EDWARDS.
DONALD W. C. HOOD, C.V.O., M.D.
W. BRUCE CLARKE.
H. P. POTTER, M.D.
S. D. CLIPPINGDALE, M.D.
J. B. BALL, M.D.

Members, September, 1906.

*** The Secretaries request that they may be informed immediately of any inaccuracy in the list, or of any change of address.

The abbreviations P., T., V.P., S., C., E.P., A., L., A.L., E.J., and E.S.J., *are attached to the names of those who have respectively held the offices of President, Treasurer, Vice-President, Secretary, Member of Council, Editor of Proceedings, Auditor, Librarian, Assistant Librarian, Editor of the* JOURNAL, *or Editorial Secretary of the* JOURNAL. *The date before each name signifies the date of election, and the letters* O.M. *signify original member.*

1904	Aarons, S. Jervois, M.D.	14, Stratford Place, W.
1897	Abel, Horace M. ..	10, King's Bench Walk, Inner Temple, E.C.
1901	Abraham, J., M.B. ..	Coleraine, County Derry, Ireland.
1886	Abraham, P., M.D. .. (V.P., S., C., E.P.)	2, Henrietta Street, Cavendish Square, W.
1896	Achard, A. L., M.D. ..	34A, Gloucester Place, W.
1896	Ackland, R. C. ..	54, Brook Street, W.
1892	Addinsell, A. W., M.B...	10, Curzon Street, W.
1890	Alderson, F. H., M.B. ..	21, Queen's Gate Terrace, S.W.
O.M.	Alderson, F. H., M.D. .. (P., V.P., C.)	Glenthorne, Princess Road, W. Bournemouth.
1902	Alderson, P. F., Surg.R.N.	88, Durnford Road, Plymouth.

O.M.	Alderton, T. Gunton .. (P., T., V.P., S., C.)	82, The Grove, Hammersmith, W.
1902	Allan, C. H.	64, Westbourne Park Road, W.
1897	Allan, James, M.B. ..	Aldborough, Chislehurst, Kent.
1898	Allen, L. Lloyd ..	Northwood, Middlesex.
1897	Allingham, Walter ..	1A, Weymouth Street, W.
1884	Anderson, W. M., M.B...	Norville, Alleyn Park, W. Dulwich, S.E.
1903	Andrews, A. G., Fleet-Surgeon R.N.	Royal Naval Hospital, Great Yarmouth.
1885	Andrews, Charles .. (V.P., C., A.)	8, Auriol Road, West Kensington, W.
1899	Ansaldi, G., M.D. ..	San Remo, Italy.
1884	Appleton, T. A. ..	46, Britannia Road, Fulham, S.W.
1904	Argles, Ernest E. ..	74, Oxford Terrace, Hyde Park, W.
1902	Armour, D. J., M.B. ..	89, Harley Street, W.
1897	Armstead, H. W., M.D.	30, Queensborough Terrace, W.
1898	Armstrong, J. T. ..	109, North End Road, W. Kensington, W.
1897	Arthur, David, M.D. ..	5, North Common Road, Ealing, W.
1904	Arthur, George, M.B. ..	30, The Avenue, Ealing, W.
1903	Atkins, J., M.B. ..	59, Addison Gardens, Kensington, W.
1906	Atkins, T. W... ..	31, Shepherd's Bush Road, W.
1885	Atkinson, T. R. (C.) ..	1, West Cromwell Road, S.W.
1902	Attlee, J., M.D. ..	58, Brook Street, W.
1893	Austen, Harold, M.D. ..	129, Harley Street, W.
1901	Bagram, George J., M.B.	1, Pembridge Gardens, W.
1904	Bailey, W. H., M.B. ..	Featherstone Hall, Southall.
1896	Baker, C. E., M.B. ..	5, Gledhow Gardens, S. Kensington, S.W.
1891	Baker, W. H.	65, Eaton Rise, Ealing, W.
O.M.	Baldock, A., M.B. (C.)..	180, Earl's Court Road, S.W.
1900	Baldwin, A. ..	6, Manchester Square, W.
1885	Ball, James B., M.D. .. (P., V.P., C., A.)	12, Upper Wimpole Street, W.
1904	Balme, Harold ..	Tai Yuen Fu, Shansi, China.
1904	Banham, S. M., M.B. ..	Ellesmere, Uxbridge Road, West Acton, W.
1898	Banting, Cecil, M.D. ..	Beeleigh, West Hill, Putney, S.W.
O.M.	Barnes, E. C. (V.P., C., A.)	194, Hammersmith Road, W.
1901	Barnes, G.	4, Wolverton Gardens, Hammersmith, W.
1903	Barnes, H. E., M.B. ..	Eye, Suffolk.
1905	Barnes, J. A... ..	Chiswick, W.
1892	Barrett, A. K.	5, Bedford Gardens, Kensington, W.
1905	Barrett, Henry E.	123, Holland Park Avenue, W.
1898	Barrett, W. P. (V.P.) ..	Millfield House, 35, Cheriton Gardens, Folkestone.
1887	Bartlett, Edward (C.)..	38, Connaught Square, W.
1899	Barton, Charles N. ..	17, Redcliffe Gardens, S.W.
O.M.	Barton, J. K.	14, Ashburn Place, Courtfield Road, S.W.
1889	Bateman, A. G., M.B. ..	7, Queen Anne Street, W.
1897	Bathurst, L. Wood, M.D.	35, Colville Terrace, W.
1888	Batten, Rayner D., M.D. (C.)	Campden Lodge, Campden Hill Road, W.
1883	Battle, W. H.	40, Harley Street, W.
1902	Bayly, H. W.	New Oxford and Cambridge Club, 68, Pall Mall, S.W.
1898	Beddard, A. P., M.D. ..	44, Seymour Street, W.
1902	Beedham, H. W., M.B.	2, Chapter Road, Willesden Green, N.W.

1902	Belfrage, S. H., M.D. ..	77, Gloucester Place, Portman Square, W.
1903	Bell, R. H., M.B. ..	27, Seymour Street, Portman Square, W.
O.M.	Benham, R. F... ..	11, Earl's Court Square, S.W.
O.M.	Bennett, C. H., M.D., J.P. (A.)	College House, Hammersmith, W.
1901	Bentham, R., Dep.Insp.-Gen. R.N.	Royal Naval Hospital, Malta.
1903	Bevan, A., M.D. ..	17, Kensington Gardens Terrace, W.
1899	Bevan, Richard ..	31, Girdler's Road, W. Kensington, W.
1891	Bidwell, L. A. (P., V.P., S., C., E.P., E.S.J.)	15, Upper Wimpole Street, W.
1902	Birt, J.	29, Belgrave Road, S.W.
1896	Bishop, T. H., M.D. ..	4, South Parade, Bedford Park, W.
1902	Blaber, Percy L. ..	Sunnybank, Shoot-up Hill, Hampstead, N.W.
1903	Black, A. C.	Strettit Place, Paddock Wood S.O., Kent.
1902	Blaikie, J. Brunton, M.B.	80, Brook Street, W.
1898	Blair, C. S., M.D. ..	Matson Lodge, Sheen Road, Richmond.
1903	Blake, J. Ff.	1, Werter Road, Putney, S.W.
1885	Blenkinsop, W. H., M.B. (C.)	7, Powis Gardens, Bayswater, W.
1905	Bond, B. M.	30, Brook Green, W.
1905	Bonney, Ernest ..	Kensington Infirmary, Kensington, W.
1893	Bonney, W. Augustus, M.D.	100, Elm Park Gardens, S.W.
1901	Bonney, W. F. Victor, M.D.	10, Devonshire Street, W.
1889	Bontor, S. A., M.D. (V.P.)	Great Berkhamsted, Herts.
1906	Borrett, G. G., Staff Surgeon, R.N.	c/o Messrs. Rutley, Son, and Vine, 6, George Street, Euston Road, N.W.
O.M.	Bott, W. H.	High Street, Brentford.
1889	Bourke, Wm. H., M.D.	8, Moreton Gardens, S.W.
1893	Bourns, N. Whitelaw, M.D.	78, Redcliffe Gardens, South Kensington, S.W.
1899	Box, Stanley, M.D. ..	47, Gordon Road, Ealing.
1888	Boyton, E. T. A. ..	46, Sebert Road, Forest Gate, E.
1899	Braine, C. Carter ..	26, Wimpole Street, W.
1902	Bray, Ernest J., M.B. ..	West Street, Durban, Natal.
1900	Brewer, Dunstan ..	Eastern Fever Hospital, Homerton, N.E.
1898	Bridges, E. C., M.D. ..	2, Courtfield Road, S.W.
1893	Brinton, R. D., M.D. ..	8, Queen's Gate Terrace, S.W.
1896	Bromet, E., (V.P.) ..	Heather Lodge, Redhill.
1903	Brookhouse, C. T., M.D.	Ashby House, Tweedy Road, Bromley, Kent.
1903	Brown, E. H., M.D., Major I.M.S.	The Hermitage, Alipore, Calcutta, Bengal.
1904	Browne, Chas. Wm. ..	Taung, British Bechuanaland, Cape Colony.
1896	Browne, E. S.	5, Cavendish Mansions, Langham Street, W.
1902	Browne, H. F., M.B. ..	29, Langham Street, Portland Place, W.
1903	Bruce, R. C., M.D. ..	10, Courtfield Road, S.W.
1890	Bruce, Robt. Marston..	Western Fever Hospital, Fulham, S.W.
1898	Brunton, W. R., M.B. ..	69, East India Road, Poplar, E.
1898	Bryan, F. Charles, M.D.	47, Princes Square, Bayswater, W.
1906	Bulleid, E., M.D. ..	10, Southwick Street, Hyde Park, W.
1904	Burrows, W. H. ..	Eagle House, Avenue Road, Acton, W.
1906	Burstall, Edwd., M.B...	St. Bartholomew's Hospital, E.C.
1903	Butler, H. O., M.B. ..	81, Sutton Court Road, Chiswick, W.
1897	Buttar, C., M.D. (S., C.)	10, Kensington Gardens Square, W.

O.M.	Buxton, A. St. C. ..	8, Mansfield Street, Cavendish Square, W.
1898	Caley, H. A., M.D. ..	24, Upper Berkeley Street, W.
1896	Campbell, H., M.D. ..	23, Wimpole Street, W.
1904	Candler, John P., M.B.	Albion House, Blindley Heath, Surrey.
1892	Carre-Smith, H. L. ..	74, Holland Park Avenue, W.
1903	Carter, W. R., M.B. ..	155, Uxbridge Road, W.
1896	Cathcart, G. C., M.B. ..	35, Harley Street, W.
1896	Chaldecott, J. H. ..	60, Harley, Street, W.
1903	Challis, O., Capt. R.A.M.C.	c/o Messrs. Holt and Co., 3, Whitehall Place, S.W.
1892	Chambers, H. W. (V.P., C., L., A.L.)	101, Goldhawk Road, W.
O.M.	Chapman, C. W., M.D... (V.P., C.)	21, Weymouth Street, W.
1892	Cheatle, G. Lenthal, C.B. (C.)	117, Harley Street, W.
1902	Chowry-Muthu, D. J., M.D.	Mendip Hills Sanatorium, Wells, Somerset.
1894	Clarke, Ernest, M.D. ..	3, Chandos Street, Cavendish Square, W.
1900	Clarke, J. Jackson, M.B.	18, Portland Place, W.
O.M.	Clarke, W. Bruce, M.B. (P., V.P., C.)	51, Harley Street, W.
1888	Clemow, Arthur H. W., M.D. (V.P., S., C., L.)	101, Earl's Court Road, W.
O.M.	Clippingdale, S. D., M.D. (P., V.P., S., C., E.P.)	36, Holland Park Avenue, W.
1906	Clutterbuck, L. A., M.B.	43, Welbeck Street, W.
1904	Cockle, Walter P., M.D.	1 Elm Villas, Ealing Green, W.
1889	Coker, O. C.	42, Woodville Gardens, Ealing, W.
1906	Colborne, W. J., Fleet Surg., R.N.	c/o Admiralty, 18, Victoria Street, S.W.
1902	Cole, R. H., M.D. ..	48, Upper Berkeley Street, W.
1883	Collier, M. P. M., M.S.	145, Harley Street, W.
1896	Collier, N. C.	18, West Kensington Gardens, W.
1901	Collum, R. W... ..	85, New Cavendish Street, W.
1890	Colman, W. S., M.D. (C.)	9, Wimpole Street, W.
1905	Coltart, G. H., M.B. ..	714, Fulham Road, S.W.
1900	Colyer, Stanley ..	
1899	Comber, C. T. T. ..	84, Palace Road, Tulse Hill, S.W.
1905	Cook, J. B., M.D. ..	Kensington Infirmary, W.
1906	Cooke, M. A.	15, Castlebar Road, Ealing.
O.M.	Cooper, Sir Alfred (P., T.)	Cooper Angus Lodge, Whiting Bay, Isle of Arran, Scotland
1901	Cooper, Bertram ..	19, Sutton Court Road, Chiswick, W.
1895	Corbould, V. A. L., M.D.	8, Victoria Road, Kensington, W.
1898	Coulson, J. E.	St. George's Infirmary, Fulham Road, S.W.
1888	Coutts, J. A., M.B. (V.P., C.)	54, Upper Berkeley Street, W.
1885	Crombie, J., M.B. .. (V.P., C.)	Sidcup, Kent.
1905	Crook, Herbert E., M.D.	Ivermore, Richmond Road, Twickenham.
1895	Crookshank, F. G., M.D. (C.)	27, The Terrace, Barnes, S.W.
1905	Crosswell, Louis O., M.B.	District Medical Officer, Black River, Jamaica.
1901	Curl, S. W., M.D. ..	Colchester.

1897	Cutler, L.	1, Kensington Gate, W.
1899	Dalton, H. C. Fitz-Gerald	Cranbourn Mansions, Cranbourn Street, W.C.
1904	Dauber, John H., M.B.	39, Hertford Street, Mayfair, W.
1904	Daniel, P. L.	152, Harley Street, W.
1897	Daniel, R. N.	13, Nevern Square, South Kensington, S.W.
1884	Daniell, D. Hugo ..	53, Campden Hill Square, W.
1906	Dartnell, L. E. ..	H.M.S. "Thames," Portsmouth.
1903	Davidson, W. A. ..	235, Uxbridge Road, W.
1898	Davies, J., M.D. ..	87, Cambridge Gardens, W.
1897	Davis, H. J., M.B. ..	8, Portman Street, Portman Square, W.
1902	Dawe, Frank S., M.D. ..	119, High Road, Chiswick, W.
1897	Dawson, G. W. ..	9, Portman Street, W.
1905	Deane, Arthur D. ..	2, The Mall, Brentford.
1896	De Castro, G.	79, Davies Street, Berkeley Square, W.
1902	Delbruck, R. E., M.B. ..	13, Buckingham Gate, S.W.
1901	Dendle, Frank, M.B. ..	Spring Grove, Isleworth.
1895	Denne, F. V., M.D. ..	69, Brook Green, W.
1886	Des Vœux, H., M.D. ..	14, Buckingham Gate, S.W.
1905	Dick, W. Barclay ..	70, Northfield Lane, West Ealing, W.
1887	Dickinson, T. V., M.D ..	33, Sloane Street, S.W.
1895	Dickman, H. G., M.B...	Little Bury, Holbech, Lincoln.
1896	Dickson, W. P... ..	Combe Park, Weston, Bath.
1886	Diplock, L. B... ..	21, Heathfield Terrace, Chiswick, W.
1906	Dixon, F. J., M.B. ..	163, Cromwell Road, S.W.
1903	Dixson, C. F. L., M.D ..	4, The Butts, Brentford.
1896	Dobson, L., M.D. (S., C., E.J.)	71, Holland Park Avenue, W.
1892	Dockrell, Morgan, M.D.	9, Cavendish Square, W.
1887	Dodd, H. W.	136, Harley Street, W.
O.M.	Dodsworth, F. C. (C.) ..	Ingledew, Chiswick, W.
1898	Don, W. Walton, M.D...	466, Edgware Road, W.
O.M.	Doran, Alban (C.) ..	9, Granville Place, W.
1905	Dubourg, A. H. ..	Chiswick House, Chiswick, W.
1898	Ducat, Arthur D., M.B.	3, Heathfield Gardens, Chiswick, W.
1887	Dudfield, T. Orme, M.D.	Ashburn, Kew Gardens Road, Surrey.
1903	Dudgeon, L. S. ..	6, Powis Gardens, Bayswater, W.
1900	Duncan, J. M., M.B. ..	Bonaccord, Wellholme Road West, Great Grimsby, Lincolnshire.
1884	Dunn, H. Percy .. (V.P., S., C., E.P., E.J.)	54, Wimpole Street, W.
1897	Dunn, J. C., M.D. ..	18, Portland Place, W.
1897	Dutch, Henry, M.D. ..	8, Berkeley Street, W.
1905	Ebell, J. H.	Ceylon Medical Service, Ceylon.
1896	Eccles, G. Tolcher, M.B. (V.P.)	63, Sackville Road, Hove, Brighton.
1896	Eccles, H. Annesley, M.D.	97, Church Road, Upper Norwood, S.E.
1890	Eccles, Wm. McAdam, M.S. (V.P., S., C., E. S.J.)	124, Harley Street, W.
1899	Eccles, W. Soltau ..	97, Church Road, Upper Norwood, S.E.
1893	Eddowes, Alfred, M.D.	28, Wimpole Street, W.
1896	Eden, T. W., M.D. ..	49, Queen Anne Street, W.

O.M.	Edwards, F. Swinford (P., V.P., C.)	55, Harley Street, W
1903	Edwards, J. M. ..	Chilchester, London Lane, Bromley, Kent.
1897	Ellacombe, G. W. ..	Bitton Vicarage, near Bristol.
1893	Elliot, Andrew, M.D. .. (S., C.)	11, Upper Berkeley Street, W.
1896	Elliott, H. F.	Sidney House, Sutton Court Road, Chiswick, W.
1895	English, T. J., M.D. ..	13, Gilston Road, S.W.
1888	Ensor, Edwin Thos., M.D.	162, Ladbroke Grove, W.
1900	Erskine, Robert, M.D...	62, Pembridge Villas, Bayswater, W.
1902	Evans, Arthur H., M.D., M.S.	84, Harley Street, W.
1903	Evans, E. Laming, M.D.	36, Bryanston Street, W.
1898	Evans, E. W. Spencer..	Assistant Emigration Office, Queenstown, Ireland.
1903	Evans, J. Howell, M.B.	63, Grosvenor Street, W.
1904	Evans, W. Hesketh, M.D.	25, St. John's Crescent, Cardiff.
1905	Ewart, R. W. T., M.B...	4, Wandsworth Bridge Road, Fulham, S.W.
1905	Falconer, A., M.B. ..	"Roslyn," Dunedin, New Zealand.
O.M.	Fenton, F. E.	Langstone, Ealing, W.
1897	Féré, E. N., M.D. ..	12, Northampton Square, E.C.
1898	Ferguson, A. S. ..	31, Harley Street, W.
1893	Fincham, W. S. (C.) ..	53, Kew Bridge Road, Brentford.
1905	Finigan, D. C. O'C., M.D.	5, Windsor Road, Ealing, W.
1897	Flavelle, J.	Junior Athenæum Club, 116, Piccadilly, W.
1904	Fleming, Thomas, M.D.	42, Harley Street, W.
1899	Flemyng, George, M.D.	Newlands, Ashley Road, Epsom.
1902	Forbes, W. W... ..	"Kia Ora," Claremont Road, Marlow, Bucks.
1904	Forsyth, J. A. C., M.B.	2, Beaumont Street, W.
1901	Fort, H. R. T.	Chorley Wood, Rickmansworth.
1888	Fountain, Ed. Osborne, M.D.	Crossley House, Sutton Lane, Turnham Green, W.
1906	Fox, W. S., M.D. ..	63, Grosvenor Street, W.
1906	Francis, J. B. C. ..	18, Lower Addiscombe Road, Croydon.
1901	Frazer, J. E.	22, Croxted Road, West Dulwich, S.E.
1902	French, A. M., Fleet-Surg. R.N.	Langley, Beaufort Road, Kingston-on-Thames.
1900	French, Gilbert ..	Thorncroft, High Road, Chiswick, W.
O.M.	Friend, H. E.	1, St. Stephen's Crescent, Westbourne Park, W.
1903	Fry, W. E. (A., C.) ..	Aberdeen House, Queen Street, Hammersmith, W.
1905	Fuller, Arthur W., M.D.	37, The Avenue, Bedford Park, W.
1887	Gardner, W. T., M.B. (V.P., C.)	Netherhall, Poole Road, Bournemouth.
1904	Garrett, John ..	Nortoft, Churchfield Road, Acton, W.
1901	Gask, George E. ..	The Warden's House, St. Bartholomew's Hospital, E.C.
1904	Gaster, Anghel, M.D. ..	68, Greencroft Gardens, West Hampstead, N.W.
1903	Gault, D., M.D. ..	Wellington, New Zealand.

1905	Gerrard, A. H., M.B. ..	"Lismore," Sutton Court Road, Chiswick, W.
1898	Gibbes, L. N.	13, Sheffield Gardens, Kensington, W.
1884	Gillingham, A... ..	439, High Road, Chiswick, W.
1903	Godfrey, H. W., M.B. ..	Southleigh, Frinton-on-Sea, Essex.
1902	Gomess, A. F. B. ..	33, Drayton Gardens, S. Kensington, S.W.
1901	Gordon-Smith, H., M.B.	17, Dartmouth Park Road, Highgate, N.
1893	Gossage, A. M., M.B. ..	54, Upper Berkeley Street, W.
1903	Graham, G. H., M.D. ..	44, Castlenau, Barnes, S.W.
1898	Grant, Alfred J., M.D. ..	6, Queen's Club Terrace, West Kensington, W.
1897	Granville, A. G. ..	56, Flanders Road, Bedford Park, W.
1894	Graydon, A.	Ajedrez Rinconada, Jujuy, Argentina.
1901	Greene, S. H.	110, Oxford Gardens, N. Kensington, W.
1903	Greg, A. H., M.B. ..	16, West Halkin Street, Belgrave Square, W.
1896	Gregory, E. T... ..	26, Redcliffe Gardens, S.W.
1896	Griffith, A. L., M.D. ..	606, Harrow Road, W.
1905	Grimmer, G. K., M.D.	"Roseneath," Hounslow.
1901	Grünbaum, Otto, M.D.	34, Wimpole Street, W.
1898	Haines, Charles H., M.D.	Kensington Palace Mansions, De Vere Gardens, W.
1896	Halley, W.	Park House, 724, Fulham Road, S.W.
1901	Hancock, C. Sortain, M.D.	33, Fairlop Road, Leytonstone.
1889	Handfield - Jones, M., M.D.	35, Cavendish Square, W.
1905	Hare, Francis, M.D. ..	93, Church Road, Upper Norwood, S.E.
1905	Harnett, W. L., M.B. ..	St. Thomas's Hospital, S.E.
1901	Harold, John, M.B. ..	91, Harley Street, W.
1896	Harrison, C. J., M.D. ..	36, Cheyne Court, S.W.
O.M.	Harrison, H. F. E. ..	33, Shepherd's Bush Green, W.
1890	Harrison, Reginald ..	6, Lower Berkeley Street, W.
1898	Harrison, R. C. ..	33, Uxbridge Road, Ealing, W.
1905	Hart, R. N.	West London Hospital, Hammersmith, W.
1896	Hartley, R., M.D. ..	Feltwell Lodge, Feltwell, near Brandon, Norfolk.
1896	Harvey, J. S., M.D. ..	1, Astwood Road, Cromwell Road, S.W.
1899	Haydon, Arthur G., M.D.	23, Henrietta Street, W.
1904	Heard, W. N., M.B. ..	94, Abingdon Road, Kensington, W.
1888	Heddy, W. J.	46, Redcliffe Gardens, S.W.
1905	Hedley, E. W., M.B.	56, Hans Place, Sloane Street, W.
1883	Hendley, T. H., Col., C.I.E., I.M.S. (Retd.) (C.)	4, Loudoun Road, St. John's Wood, N.W.
1900	Henshaw, H. W. ..	1, Priory Terrace, Kew.
1903	Hill, A. C., M.D. ..	169, Cromwell Road, W.
1905	Hill, E. B., M.B. ..	6, Bath Road, Bedford Park, Chiswick, W.
1890	Hill, William, M.D. ..	26, Weymouth Street, W.
1897	Hills, W. C. D.	New Bridge House, Upwell, Wisbech.
1888	Hill-Wilson, Arthur E.	30, Stamford Brook Road, W.
O.M.	Hogan, J. C., M.D. ..	3, Redcliffe Gardens, South Kensington, S.W.
1898	Hogg, F. S. D... ..	The Cedars, Rickmansworth.
1898	Holloway, Samuel F. ..	Holmwood, The Avenue, Bedford Park, W.
O.M.	Hood, D. W. C., C.V.O., M.D. (P., V.P.)	43, Green Street, W.

1903	Hoskyn, D. T., M.B., Fleet-Surg. R.N.	H.M.S. "Crescent," Cape of Good Hope Station.
1904	Humphreys, Chas. S., M.D.	85, Gunterstone Road, West Kensington, W
1885	Humphreys, F. W. ..	44, Addison Gardens, W.
1893	Hunter, William, M.D.(C.)	103, Harley Street, W.
1887	Hurlbutt, S.	15, Old Burlington Street, W.
1896	Ince, A. G.	Sturry, Kent.
1901	Inchley, O., M.D. ..	16, Victoria Street, Loughborough.
1899	Isaacs-Coke, E. P ..	1, Sinclair Road, Kensington, W.
1902	James, Arthur, M.D. ..	69, Gloucester Terrace, W.
1895	James, J. Brindley ..	83, Bridge Road, Hammersmith, W.
O.M.	James, W. Culver, M.D. (C.)	15, Marloes Road, Kensington, W.
1896	Jessop, W. H., M.B. ..	73, Harley Street, W.
1891	John, William.. ..	24, Belsize Park Gardens, Hampstead, N.
1904	Johnston, Alex. J. J., Dept. Insp,-Gen. R.N.	
1894	Johnston, George F., M.D.	3, Montagu Place, Montagu Square, W.
1900	Johnston, R. C., M.B., Capt. R.A.M.C.	
1905	Joll, Boyd Burnett, M.B.	8, Hanger Lane, Ealing, W.
1899	Jones, H. S. Wansborough, M.B.	Poplar Cottage, Harrow.
1887	Jones, Macnaughton, M.D.	131, Harley Street, W.
1886	Juler, H. E.	23, Cavendish Square, W.
1896	Keep, A. C., M.D. ..	14, Gloucester Place, W.
O.M.	Keetley, C. B... .. (P., V.P., S., C., E.P., L.)	56, Grosvenor Street, W.
1902	Kerr, D. O., M.B. ..	32, Camberwell New Road, S.E.
1884	Kiallmark, H. W. ..	5, Pembridge Gardens, W.
1906	Kidd, A., Fleet-Surgeon, R.N.	H.M. Dockyard, Pembroke.
1901	Kingsford, A. B. ..	19, Upper George Street, W.
1897	Kingsford, B. H., M.B.	Sherwood, Guildford Road, Woking.
1904	Kinsey-Morgan, A., M.D.	Hillcote, Richmond Hill, Bournemouth.
1904	Kinsey-Morgan A. ..	Littleburn, Poole Road, Bournemouth.
1892	Kinsey-Taylor, A. E., M.B.	26, Lancaster Gate, W.
1902	Kirby, R. A., M.B. ..	193, St. James's Court, S.W.
1897	Kirby, W., M.D. ..	Hilden, Sutton Court Road, Chiswick, W.
1900	Kirkaldy, W. B., M.D...	355, High Road, Chiswick, W.
1896	Knight, H.	Eskholme, Shirley, Southampton.
1887	Lake, Richard.. .. (V.P., S., C., E.P.)	60, Harley Street, W.
O.M.	Lamb, W. H., M.B. .. (V.P., C.)	23, Palace Court, W.
1894	Lancaster, H. F., M.D.	154, Westbourne Terrace, W.
1904	Landon, E. E. ..	Bradbourne House, Acton, W.
1901	Last, C. E.	Bletsoe House, Littlehampton.

O.M.	Lawrance, F. (P., T., V.P., C.)	3, St. Peter's Square, Hammersmith, W.
1904	Lawson, Fred. J., M.B.	Sherwood, 4, Palewell Park, East Sheen, S.W.
1905	Leaf, Cecil H.	75, Wimpole Street, W.
1905	Lees, Charles A. ..	39, Lavington Road, West Ealing, W.
1884	Leeson, Oliver J. ..	Collingham House, Cromwell Road, S.W.
1900	Lehane, D., M.D. ..	29, Egerton Crescent, S.W.
1905	Lempriere, C. M. D'A.	118, Castlenau, Barnes, S.W.
1898	Leslie, R. Murray, M.B.	26, Harley Street, W.
1898	Levy, A. G., M.D. ..	41, Devonshire Street, W.
1893	Lewis, Ernest Wool ..	The Hermitage, Fulham Palace Road, S.W.
1890	Ley, G., Staff-Surg. R.N.	11, Longfield Road, Ealing, W.
1902	Lilly, F. J., Fleet-Surgeon R.N.	H.M.S. "King Edward VII.," Atlantic Fleet, Gibraltar.
1906	Lincoln, C. H. S., Captain I.M.S.	c/o. Messrs. Grindlay & Co., Bombay.
1901	Lister, T. D., M.D. ..	50, Brook Street, W.
1892	Lloyd, F. G.	103, Oakwood Court, Addison Road, W.
O.M.	Lloyd, R. W. .. .. (P., V.P., S., C, E.P.)	103, Oakwood Court. Addison Road, W.
1902	Lock, G. H.	133, Uxbridge Road, W.
1890	Lockyer, C. H. J., M.D. ..	117A, Harley Street, W.
1892	Loftus, A. S.	Collingbourne, Christchurch Road, Boscombe.
1883	Longhurst, A. K. ..	Hughenden, Mount Park Road, Ealing, W.
1896	Low, F. H., M.B. (V.P., C.)	Heath Bank, Blackheath Rise, S.E.
1906	Low, G. C., M.B. ..	57, Welbeck Street, W.
1882	Low, R. Marsden, M.B. (C.)	70, Philbeach Gardens, S.W.
1902	Lund, K. F., M.B. ..	8, Collingham Road, South Kensington, S.W.
O.M.	Lunn, J. R. (V.P., C.) ..	St. Marylebone Infirmary, Notting Hill, W.
1888	Lush, Percy J. F., M.B. (A.)	4, Maresfield Gardens, Hampstead, N.W.
1896	Lyle, F. W., M.D. ..	97, Gordon Road, Ealing, W.
1890	Lynes, John	2, Argyll Road, Kensington, W.
1898	Lyon, A. Barclay, M.D. (C.)	165, The Grove, Hammersmith, W.
1896	Lyth, E. R., M.B. ..	117, Goldhawk Road, W.
1894	McCann, F. J., M.D. .. (V.P., S., C.)	5, Curzon Street, W.
1897	McDougal, E. D. ..	Ruel, Walton-on-Thames.
1906	MacDowell, E. C., M.D.	The Mall House, Sligo.
1902	McKay, J. B., M.D. ..	43, St. Thomas's Square, Newport, I.W.
1902	McKenzie, J., M.B., Lt. R.A.M.C.	Station Hospital, Calcutta.
1898	Mackintosh, R. D., M.B.	The Bungalow, Mortlake, S.W.
1890	Maclaren, J. A., M.B. ..	2, Fairholme Road, W. Kensington, W.
1897	Macleod, W. A., M.B. ..	9, Pembridge Villas, Bayswater, W.
1897	McNamara, J., M.D. ..	3, Holland Road, Kensington, W.
1890	Macnaughton, G. W. F., M.D.	33, Lower Belgrave Street, S.W.
1902	Maguire, Geo., M.D. ..	Glengariff, Kew Road, Richmond, Surrey.
1898	Maidlow, W. H., M.D. (V.P.)	Ilminster, Somerset.
1903	Malcolm, A. J. ..	39, Gwendwr Road, W. Kensington, W.
1896	Malcolm, J. D., M.B. ..	13, Portman Street, Portman Square, W.

O.M.	Mallam, W. P. (V.P., C.)	169, Uxbridge Road, W.
1891	Mallard, F. R. (C., A.)..	23, Bridge Road, Hammersmith, W.
1890	Mansbridge, J. (C.) ..	112, Harley Street, W.
1885	Mark, Leonard, M.D. .. (P., V.P., S., C., E.P., A.)	49, Oxford Terrace, Hyde Park, W.
1883	Marsh, Howard, M.C. ..	14, Hertford Street, Mayfair, W., and 10, Scroope Terrace, Cambridge.
1904	Marshall, J. C., M.D. ..	36, Albion Street, Hyde Park, W.
1885	Masters, J. A., M.D. (V.P., C.)	94, Knightsbridge, S.W.
1898	Maunsell, D. F. (C.) ..	67, Earl's Court Road, S.W.
1903	Maxwell, R. F. ..	211, Uxbridge Road, W.
1898	May, C. Gould, M.D. ..	59, Cadogan Place, S.W.
1902	Meachen, G. Norman, M.D.	11, Devonshire Street, W.
1899	Melville, Stanley, M.D.	18, Nevern Road, Earl's Court, S.W.
1887	Mennell, Zebulon ..	1, Royal Crescent, Notting Hill, W.
1903	Mennell, Zebulon, M.B.	57, Holland Park Avenue, W.
1894	Menzies, Henry, M.B. ..	4, Ashley Gardens, S.W.
1885	Menzies, J. Herbert .. (V.P., S., C., E.P.)	47, Earl's Court Square, S.W.
1905	Micklethwait, G. ..	1, Driffield Terrace, The Mount, York.
1896	Miles, W. E.	17, Devonshire Place, W.
1906	Millard, A. S., M.B. ..	Costock Rectory, Loughborough.
1899	Millard, W. J. Kelson, M.D.	Frediden, Hewlett Road, Cheltenham.
1895	Miller, F. R., M.D. ..	70, Holland Road, Kensington, W.
1893	Mills, H. H., M.B. ..	21, St. Mary Abbott's Terrace, Kensington, W.
1901	Mitchell, G. H., M.B. ..	71, Craven Park, Harlesden, N.W.
1888	Moore, Stephen H. ..	75, Sydney Street, Chelsea, S.W.
1906	Moorhead, J., M.D., Colonel I.M.S.	15, Kensington Park Road, W.
1900	Morier, C. G. D. ..	1, Hamilton Terrace, N.W.
1896	Morison, A., M.D. (V.P., C.)	14, Upper Berkeley Street, W.
1893	Morris, E. H. Grant, M.B.	Arisaig, Rockcliffe, Dalbeattie, N.B.
1896	Mortimer, J. D., M.B. (C.)	4, Burton Court, Lower Sloane Street, S.W.
1896	Moullin, J. A. Mansell, M.B. (V.P., C.)	80, Porchester Terrace, W.
1896	Muggleton, F. C., M.D.	St. Albans, Festing Grove, Southsea.
1905	Muir, J. C., M.D. ..	St. George's Infirmary, Fulham Road, S.W.
1905	Murray, Charles, M.D.	53, Trinity Road, Wimbledon, S.W.
1896	Musson, William C. (A.)	61, Bridge Avenue, Hammersmith, W.
1904	Nash, A. T., M.D. ..	36, Blenheim Crescent, W.
1906	Newton, C. J.	5, The Grove, Hammersmith, W.
1896	Nicol, T. V.	147, Cromwell Road, S.W.
1904	Nightingale, P. A., M.D.	9, Campden Hill Road, Kensington, W.
1900	Nitch-Smith, R. ..	10, New Bond Street, W.
1903	Nolan, W.	20, Talbot Road, Bayswater, W.
1900	Norbury, W.	12, Moreton Gardens, S.W.
1896	Norman, F., M.D. ..	5, Holland Road, Brixton, S.W.
1900	Norton-Taylor, A. ..	West Hoathly, Sussex.
1895	Orr, J. J., M.D. ..	493, King's Road, Chelsea, S.W.

1902	Orton, G. Harrison, M.B.	7, Campden Hill Road, Kensington, W.
1894	Otway, A. Carrol ..	63, Castlenau, Barnes, S.W.
1905	Overy, Harry, M.B., ..	8, Devonshire Street, Portland Place, W.
1902	Oxley, A. James Rice, M.D. (V.P., C.)	5, Kensington Square, W.
1902	Page, H. M., M.D. ..	14, Grenville Place, S.W.
1888	Paget, Stephen (C.) ..	70, Harley Street, W.
1905	Palmer, C. Spencer ..	Brooke Lodge, Redhill.
O.M.	Palmer, F. S., M.D. ..	19, Harley Street, W.
1887	Paramore, R., M.D. ..	2, Gordon Square, W.C.
1896	Pardoe, J. G., M.B. (C., E.S.J.)	77, Wimpole Street, W.
1894	Parker, Charles A. ..	141, Harley Street, W.
1890	Parker, W. Turnour ..	68, Lillie Road, Fulham, S.W.
1903	Parmer, W. F., M.B. ..	2, Linden Gardens, Notting Hill Gate, W.
1901	Parsons, C. T., M.D. ..	Fulham Infirmary, Hammersmith, W.
1898	Paterson, H. J., M.B. ..	9, Upper Wimpole Street, W.
1887	Paterson, W. B. ..	7A, Manchester Square, W.
1882	Patmore Tennyson (C.)	63, Cambridge Gardens, North Kensington, W.
1896	Paton, E. P., M.D., M.S. (C., S.)	53, Queen Anne Street, W.
1899	Patterson, J., M.D. ..	British Consulate, Constantinople.
1903	Peake, W. H., M.D. ..	1, Platts Lane, Hampstead, N.W.
1900	Pentreath, H. M. ..	
1900	Pernet, George ..	94, Harley Street, W.
1897	Philps, F. G.	3, Richmond Mansions, Earl's Court, S.W.
O.M.	Pickett, J., M.D.(V.P., C.)	49, Queen Victoria Street, E.C.
1905	Pike, Douglas R., M.B.	3, Cromwell Crescent, Kensington, S.W.
1897	Pitt, F. D.	115, High Road, Chiswick, W.
1905	Plews, J. M.	Gore Farm Hospital, Dartford, Kent.
1883	Pocock, F. E., M.D. ..	The Limes, St. Mark's Road, Notting Hill, W.
1901	Podmore, R.	The Cottage, S. Parade, Bedford Park, W.
1903	Pollock, A. K. H. ..	Dibrugarh, Assam.
1896	Pollock, J. D., M.D. ..	98, Earl's Court Road, S.W.
1898	Pollock, Rowland (V.P., C.) ..	Penton Lodge, Mill Hill Park, W.
1897	Porter, R. I.	90, Edith Road, W.
1896	Potter, E. Furniss, M.D. (V.P., C.)	49, Queen Anne Street, W.C.
O.M.	Potter, H. Percy, M.D... (P., V.P., C.)	Kensington Infirmary, Marloes Road, W.
1899	Poulter, A. R.	67, Gordon Mansions, W.C.
1900	Poynder, F. C., M.B. ..	92, High Street, East Grinstead.
1900	Pratt, C. C.	10, Downleaze, Sneyd Park, Bristol.
1896	Pritchard, O., M.D. ..	37, Southwick Street, Hyde Park, W.
1902	Provis, F. Lionel ..	11, Brook Street, W.
1903	Reckitt, E. B., M.D. ..	Boston, Lincolnshire.
1885	Reece, R. J., M.D. ..	62, Addison Gardens, W.
1902	Reid, G., M.B.	Mersey Road, Blundellsands, Liverpool.
1883	Reid, John, M.D. ..	Westmill Rectory, Buntingford, Herts.
1902	Renny, A. W., M.B. ..	Durham Lodge, Shirley, Southampton.
1891	Revill, G. L. H. ..	Heighington, Lincoln.
1903	Rhodes, J. H., M.B. ..	30, Brechin Place, S. Kensington, S.W.

O.M.	Richardson, Gilbert, M.D.	19, Putney Hill, S.W.
1904	Richardson, Martin J. M.B.	47, Gloucester Place, Portman Square, W.
1903	Richmond, W. S. ..	25, Queensberry Place, S. Kensington, S.W.
1887	Roberts, John D. ..	103, Uxbridge Road, Ealing, W.
1900	Robinson, E. Tait, M.D.	21, Gloucester Place, W.
1890	Robinson, G. H. D., M.D. (V.P., S., C.)	17, Seymour Street, Portman Square, W.
1903	Robson, A. W. Mayo ..	8, Park Crescent, Portland Place, W
1898	Rock, Frank E., M.D. (A.)	Huddersfield.
1898	Roe, William F. ..	121, Old Street, E.C.
O.M.	Rogers, Hildyard ..	43, Uxbridge Road, W.
1900	Ross, T. Mackay, M.B.	21, Cremorne Road, Chelsea, S.W.
1883	Roughton, E. W., M.D.	38, Queen Anne Street, W.
1893	Routh, Amand J. M., M.D.	14A, Manchester Square, W.
1902	Ruck, D. N.	26, Kenilworth Road, Ealing.
1898	Rudd, W. A.. M.D. ..	Danehurst, Acton Hill, W.
1902	Russell, A. E., M.D. (C.)	9, Wimpole Street, W.
1898	Rutherford, A. F., M.B. (S., C.)	Ford Green, Stoke-on-Trent.
1897	Ryall, Charles	62, Harley Street, W.
1893	Ryall, E. C.	85, Harley Street, W.
1901	St. Aubyn-Farrer, Chas.	7, Westbourne Park Road, W.
1902	Salt, E. C., M.B. ..	Bridge Street, Burton-on-Trent.
1905	Sames, J. W., ...	Morton House, 135, Avenue Road, Acton, W.
1906	Sanders, J. H., M.D. ..	1, Palace Gardens Mansions, Bayswater, W.
1899	Saunders, E. A., M.B. (V.P., S., C.)	49, Harley Street, W.
1893	Savery, Frank (V.P., C.)	4, Mount Park Road, Ealing, W.
O.M.	Schacht, F. F., M.D. .. (P., V.P., S., C., L.)	153, Cromwell Road, S.W.
1895	Schofield, S. R., M.B. ..	1, Gunterstone Road, West Kensington, W.
1889	Scott, A., M.D... ..	Bradford Street, Bocking, Essex.
1894	Scott, A. L.	115, Uxbridge Road, Ealing, W.
1901	Scott, C. C., M.B. ..	The Hollies, St. Margarets, Twickenham.
1898	Scott, Lindley M., M.D.	98, Sloane Street, S.W.
1897	Seccombe, P., M.B. ..	Fern Lea, West Drayton.
1902	Seymour, H. F., M.B. ..	College Gates, High Street, Worcester.
1894	Shaw, Arthur H. P. ..	Cranbrook, Kent.
1906	Shaw, Ernest H. ..	52, Edric Road, New Cross, S.E.
1898	Shaw-Mackenzie, J. A., M.D.	42, Green Street, Park Lane, W.
O.M.	Sheldon, T., M.D. J.P. ..	25, Powis Square, Notting Hill, W.
1901	Sheldon, W. Sirr ..	44, Cornwall Road, Notting Hill, W.
1901	Shepheard, H. ..	19, Brook Green, W.
1896	Shuter, G. P., M.B. (V.P., S., C.)	Cleveland House, Chiswick Lane, W.
1895	Shuttleworth, G. E., M.D.	Ancaster House, Richmond, Surrey.
1904	Sibley, O. Carden ..	11, Elmwood Gardens, Acton Hill, W.
1903	Sikes, A. W., M.D. ..	40, Argyll Road, Kensington, W.
1902	Silcock, A., M.D., Lt.-Col. I.M.S.	Civil Surgeon, Raipur, Central Provinces, India.
1904	Simson, H. J. F., M.B.	36, Grosvenor Street, W.

1899	Simpson, G. A. Garry (V.P., C., S.)	42, Cleveland Square, Hyde Park, W.
1906	Simpson, W. Allan, M.B.	"Benalon," South Parade, Bedford Park, W.
1898	Sinclair, A. M. Ross, M.B. (V.P., C.)	213, New King's Road, Parson's Green, S.W.
1904	Sinclair, John, M.D. ..	General Post Office, E.C.
1906	Sington, H. S.	44, St. Mary's Mansions, W.
1900	Slater, W., M.D. ..	Woodland Cottage, New Wanstead, N.E.
1901	Slocock, R.	Spilsby, Lincolnshire.
1906	Smith, Austin, Major I.M.S.	c/o Messrs. King & King, Bombay.
1901	Smith, A. Tennyson, M.D.	Shanklin, Orpington, Kent.
1906	Smith, Edwin, M.D. ..	96, Sloane Street, S.W.
1897	Smith, G. C., M.D. ..	14, South Street, Newton Abbot.
1883	Smith, H. A., M.D., J.P.	84, London Road, Bromley.
1900	Smith, Joseph, J.P. ..	15, Bath Road, Bedford Park, W.
1906	Smith, P. Montague M.D.	196, Earl's Court Road, W.
1886	Smith, Stanley, M.D. ..	68, Wimpole Street, W.
1886	Smith, Travers R., M.D.	13, Kilburn Park Road, N.W.
1896	Snape, E., M.D. ..	41, Welbeck Street, W.
1901	Snowden, A. de W., M.D.	St. Vedast, 25, Carlton Road, Putney, S.W.
1898	Spaull, Percy W. ..	1, Stanwick Road, W. Kensington, W.
1903	Speirs, H. M., M.B. ..	The Cedars, Diss, Norfolk.
1890	Spencer, Herbert, M.D.	104, Harley Street, W.
1896	Spencer, M. H., M.D. ..	92, Oxford Gardens, N. Kensington, W.
1896	Squire, J. E., M.D. ..	5, Harley Street, W.
1900	Stabb, Arthur, M.B. ..	132, Harley Street, W.
1886	Starkie, R. F., M.D. ..	76, Gloucester Street, Warwick Square, S.W.
1891	Startin, James ..	15, Harley Street, Cavendish Square, W.
1898	Steegmann, E. J., M.B.	Derby House, Spring Grove, Isleworth, W.
1904	Steggall, Septimus L. J.	Port Limon, Costa Rica.
1905	Stoddart, W. H. B., M.D.	Bethlem Royal Hospital, S.E.
1903	Stoker, E. W.	9, Old Burlington Street, W.
1887	Sunderland, Sept., M.D.	11, Cavendish Place, W.
1905	Sutherland, D.S., M.D.	Met. Asyl. Board Hospital, Stockwell, S.W.
1896	Sutherland, G. A., M.D.	73, Wimpole Street, W.
1900	Swain, E.	Fairholme, Uxbridge Road, Hampton Hill.
1896	Swinhoe, G. R. ..	The Close, New Swindon, Wilts.
1887	Tait, E. S., M.D. ..	48, Highbury Park, N.
1905	Taylor, James, M.D. ..	49, Welbeck Street, W.
1905	Taylor, J. F.	Fairlight House, High Road, Leyton, N.E.
1892	Taylor, Michael H. (C.)	Newark House, Richmond, S.W.
1905	Taylor, Thomas	Lavington House, Ealing, W.
1886	Taylor, Seymour, M.D. (P., V.P., C.)	16, Seymour Street, Portman Square, W.
1893	Thompson, Maitland ..	The Marlowes, Boxmoor, Herts.
1906	Thomson, A. K., M.B.	65, Lancaster Road, N. Kensington, W.
1889	Thomson, J. C., M.D. ..	111, Sinclair Road, West Kensington Park, W.
1902	Thorne-Thorne, Leslie, M.D.	45, Inverness Terrace, W.
1901	Thornhill, W. H., Lt.-Col. I.M.S.	85, Pimlico Road, S.W.
1889	Thornton, B.	Berkeley Lodge, Margate.

1904	Thornton, H. J. ..	The Maples, Acton, W.
1902	Timmins, J. L., M.D. ..	Bardon House, East Acton, W.
1906	Toley, C. J., M.D. ..	91, Dean Street, Soho, W.
1905	Tomlinson, W. R. ..	57, Airdale Avenue, Chiswick, W.
1897	Townsend, M. M. ..	15, Queen Street, Hammersmith, W.
1905	Travers, E. F., M.B. ..	2, Phillimore Gardens, W.
1900	Travers, F. T., M.B. ..	6, Clarendon Place, Maidstone.
O.M.	Travers, W., M.D. .. (P., V.P., C.)	2, Phillimore Gardens, Kensington, W.
1900	Treherne, F. H., Lt.-Col. R.A.M.C.	c/o The Director-General A.M.S., 68, Victoria Street, S.W.
1898	Trethowan, William, M.B.	170, Aberdeen Street, Perth, W. Australia.
O.M.	Tuke, C. M. (P., V.P., C.)	Chiswick House, Chiswick, W.
1892	Tuke, T. Seymour, M.B.	30, Queen Anne Street, W.
1896	Tunnicliffe, F. W., M.D.	129, Harley Street, W.
1893	Turnbull, G. L., M.D. ..	47, Ladbroke Square, W.
1896	Twynam, G. E. (V.P., C.)	31, Gledhow Gardens, South Kensington, S.W.
1902	Tyrrell, F. A. C., M.B. ..	94, Harley Street, W.
1896	Tyson, W. J., M.D. ..	Castle Hill Avenue, Folkestone.
1896	Vallencey, A. d'Estampes	34, Shaftesbury Road, Hammersmith, W.
1891	Waggett, E. B., M.B. ..	45, Upper Brook Street, W.
1903	Wainwright, F. R., M.D.	
1904	Walcot, Thomas, M.D...	Camberley, Surrey.
O.M.	Walker, Horace (V.P., C.)	143, Hammersmith Road, W.
1905	Walker, J. W. Thomson	30, Queen Anne Street, W.
1901	Walker, L. A., M.B. ..	168, Ladbroke Grove, W.
1889	Wall, Reginald B. ..	72, Bishop's Road, W.
1896	Wallace, F. G., M.B. ..	186, Earl's Court Road, S.W.
1905	Wallace, James, M.D. ..	7, Elmwood Gardens, Acton Hill, W.
1898	Wallace, Joseph B., M.B.	39, Battersea Rise, S.W.
1886	Walsh, David, M.D. ..	Lamb Building, Temple, E.C.
1899	Walter, W. H., M.D. (S., C.)	Hambleden Croft, Windmill Road, Brentford.
1896	Walters, F. R., M.D. ..	Pinecroft, Farnham, Surrey.
1903	Ward, E. C., M.D., Staff-Surg. R.N.	H.M.S. "Carnarvon," Mediterranean Station.
1899	Warde, Wilfrid B., M.D.	13, Lonsdale Gardens, Tunbridge Wells.
1897	Waterhouse, H. F., M.D.	81, Wimpole Street, W.
1897	Watson, J. K., M.D. ..	Byfleet, Surrey.
1892	Watts, A. T. Guy, M.B.	7, Holland Villas Road, Kensington, W.
1890	Waugh, H. D., M.D. ..	18, Onslow Gardens, S.W.
1888	Webb, H. (V.P., C.) ..	Wentworth House, Parson's Green, S.W.
1885	Wells, A. G. (V.P., C.) ..	215, North End Road, W. Kensington, W.
1901	West, Samuel, M.D. ..	15, Wimpole Street, W.
1893	Wharry, H. G. Oliphant	55, Park Street, Grosvenor Square, W.
1883	Wheatley, A. W., M.B. (A.)	59, Abingdon Villas, Kensington, W.
1891	White, C. Percival, M.B.	22, Cadogan Gardens, S.W.
1903	Whitelegge, W. A., M.D., Fleet-Surgeon R.N.	H.M.S. "Cornwallis," Channel Fleet.

1896	Whitfield, Arthur, M.D. (C.)	21, Bentinck Street, W.
1904	Wigan, Clarence E., M.D.	24, Cheyne Walk, Chelsea, S.W.
1888	Williams, Alex. L. ..	33, Campden House Road, Kensington, W.
1902	Williams, Chisholm ..	20, Bedford Square, W.C.
1890	Williams, H. Lloyd ..	2, Upper Wimpole Street, W.
1889	Williams, R. Muzio, M.D.	35, Kensington Park Gardens, W.
1906	Wilson, A. Gordon, M.D.	1, Philbeach Gardens, Earl's Court, S.W.
1906	Wilson, C. E. A., M.B.	13, Collingham Road, S.W.
1905	Wilson, E.M., C.B., C.M.G., D.S.O., Lt.-Col. R.A.M.C.	Belmont, Osborne Road, South Farnborough.
1904	Wilson, John H., M.D..	7, Ladbroke Square, W.
1891	Wilson, R. W., M.D. ..	The Moorings, Ennerdale Road, Kew Gardens.
1891	Wilson, William, M.B...	184, Goldhawk Road, W.
1904	Wiseman, J. G. ..	Stranraer, St. Peter's Road, St. Margaret's-on-Thames.
1897	Woakes, C.	52, Harley Street, W.
1905	Wolfe, J. H.	"Inglewood," Seward Road, Hanwell, W.
1889	Wood, N. T., M.D. (V.P., S., C.) ..	42, Elvaston Place, S.W.
1884	Woodforde, A. P. ..	21, Chatsworth Gardens, Acton Hill, W.
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